

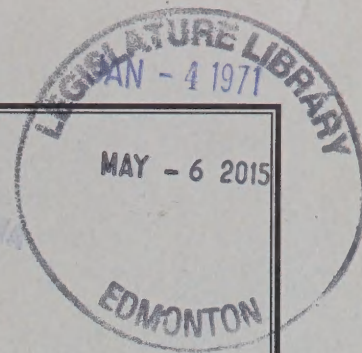
CA2 ALPH
A56
1967

ALBERTA LEGISLATURE LIBRARY



3 3398 00413 2998

37



37
ANNUAL REPORT

OF THE

2/
Department of Health & Social Development

INCLUDING

Vital Statistics Division

PROVINCE OF ALBERTA

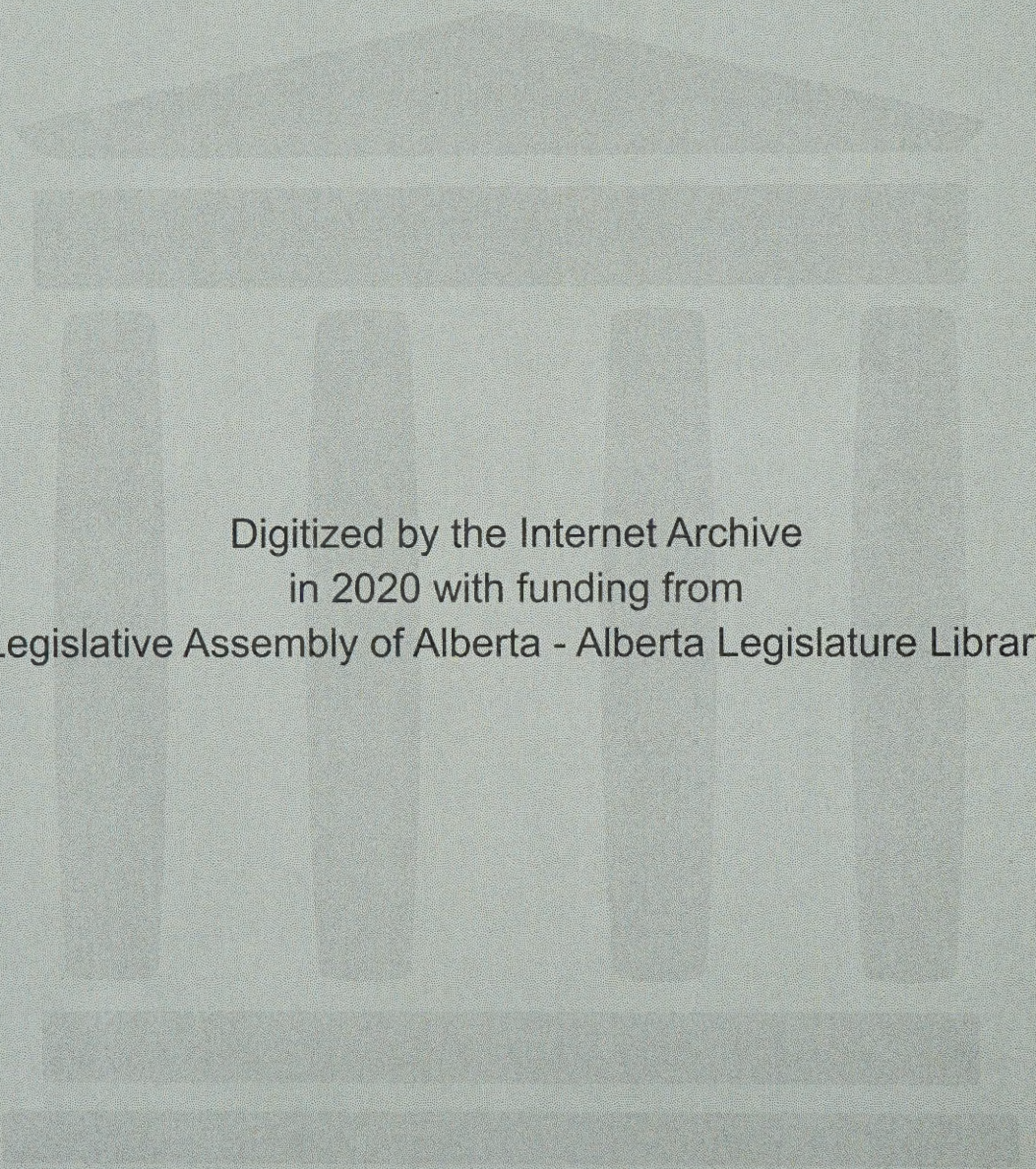
4/
1967

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON, ALBERTA

Printed by L. S. WALL, Printer to the Queen's Most Excellent Majesty

1969



Digitized by the Internet Archive
in 2020 with funding from
Legislative Assembly of Alberta - Alberta Legislature Library



ANNUAL REPORT

OF THE

Department of Health

INCLUDING

Vital Statistics Division

PROVINCE OF ALBERTA

1967

PUBLISHED BY ORDER OF THE LEGISLATIVE ASSEMBLY

EDMONTON, ALBERTA

Printed by L. S. WALL, Printer to the Queen's Most Excellent Majesty

1969

November 30, 1968.

TO HIS HONOUR,

J. W. GRANT MacEWAN,

Lieutenant Governor of the Province of Alberta.

SIR:

I have the honour to transmit herewith the Annual Report of the Department of Health for the year 1967.

I have the honour to be, Sir,

Your obedient Servant,

J. DONOVAN ROSS, B.A., M.D.,

Minister of Health.

CONTENTS

LIST

November 30, 1968.

TO THE HONOURABLE DR. J. DONOVAN ROSS,
MINISTER OF HEALTH,
Administration Building, Edmonton, Alberta.

SIR:

I have the honour to submit herewith the Forty-Ninth Annual Report of the
Department of Health.

I have the honour to be, Sir,

Your obedient Servant,

P. B. Rose, M.D.,

Deputy Minister of Health.

CONTENTS

PART I

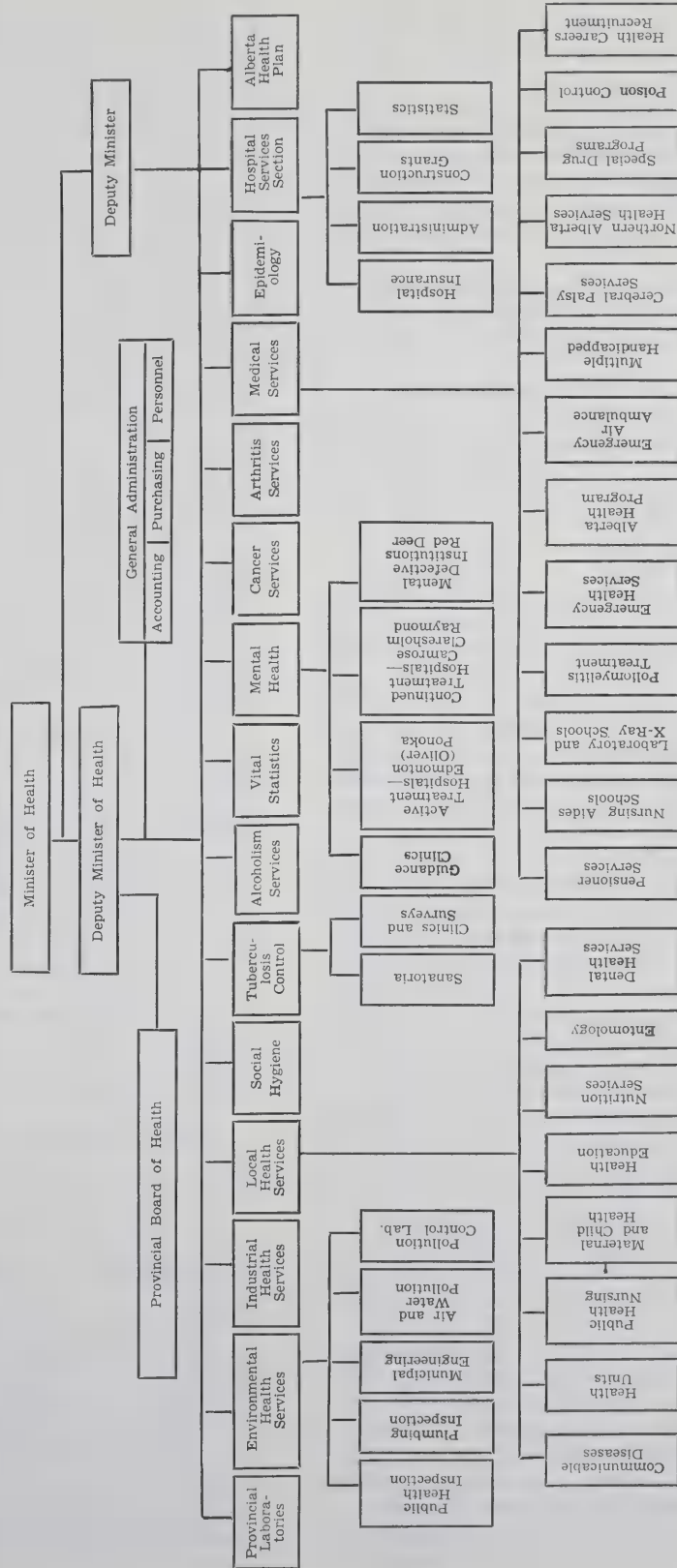
	Page
Summary	10
Division of Local Health Services	17
Communicable Diseases	18
Health Units	30
Public Health Nursing	31
Maternal and Child Health	34
Dental Health Services	35
Health Education	41
Nutrition Services	42
Entomology and Vector Control	44
Division of Medical Services	46
Emergency Health Services	46
Special Handicapped Children's Program	46
Registry for Handicapped Children and Adults	46
Cystic Fibrosis Program	47
Diabetic Treatment Program	47
Phenylketonuria Program	47
Rheumatic Fever Program	47
Emergency Air Ambulance Service	48
Poliomyelitis Treatment Program	48
Treatment Services for Social Service Recipients	49
Schools for Nursing Aides	54
Registry for Nursing Aides	54
Health Careers Recruitment Program	54
Laboratory and X-Ray School	54
Northern Alberta Health Services	54
Cerebral Palsy Clinic	55
Poison Control Service	55
Alberta Health Program	59
Division of Epidemiology	60
Division of Cancer Services	61
Division of Social Hygiene	63
Provincial Laboratories	68
Division of Environmental Health Services	73
Division of Industrial Health Services	83
Civil Service Nursing Branch	86
Division of Alcoholism	87
Division of Arthritis Services	90
Alberta Health Plan Division	91
Division of Tuberculosis Control	92
Division of Mental Health	104
Alberta Guidance Clinics	114
Active Treatment Hospitals	117
Alberta Hospital, Ponoka	121
Alberta Hospital, Edmonton	128
Continued Treatment Hospitals	136
Alberta Hospital, Claresholm	136
Alberta Hospital, Raymond	138
Rosehaven, Camrose	140
Institutions for Mental Defectives	143
Alberta School Hospital, Red Deer	143
Deerhome, Red Deer	148
Unit for Emotionally Disturbed Children	151
Linden House, Red Deer	151
Eugenics Board	154
National Health Grants	155
Blood Transfusion Service	156

PART II

Vital Statistics (See separate Contents Page)

Note: See separate publication covering Annual Report of the Hospital Services Section for the year 1967.

Department of Health—Alberta
DIVISIONAL ORGANIZATION
December - 1967



PROVINCIAL BOARD OF HEALTH

The Provincial Board of Health met on four occasions during 1967. Some of the major items considered during these meetings are reviewed in this report.

Dr. R. D. Stuart who as Provincial Bacteriologist has been a member of the Provincial Board of Health resigned due to illness in April, 1967. He was succeeded by Dr. J. M. S. Dixon. Dr. M. G. McCallum who was on sick leave for the latter portion of 1966 retired on October 1st, 1967 and was replaced as Chairman by Dr. P. B. Rose who, along with Mr. H. L. Hogge, member, completed the Board's membership throughout the year. Mr. L. E. Stewart, Chief Public Health Inspector, acted as Secretary.

Regulations Amended During the Year

Alberta Regulation 230/67 (O.C. 1021-67). Amendments to Regulations for the Control of Communicable Disease. These changes affected the isolation, quarantine and special measures for Meningitis, Viral or Aseptic, and for Scarlet Fever and Streptococcal Sore Throat to ensure in each case that reasonable control methods are provided.

Alberta Regulation 231/67 (O.C. 1022-67). Amendments to Regulations for the Control of Air Pollution. These amendments clarify certain sections of the Regulations.

Alberta Regulation 232/67 (O.C. 1023-67). Amendments to Regulations Respecting Food and Drink. New sections have been added to the regulations to provide that all perishable foods on food handling premises be kept under refrigeration and also to provide that frozen foods be frozen and stored at proper temperatures.

The Board received information during the year that certain persons suffering from or suspected to be suffering from communicable forms of tuberculosis were refusing treatment or examination and thus endangering other persons. After proper investigation in each case, orders were issued under authority of the Communicable Disease Regulations covering the removal of persons concerned to hospitals and sanatoria for treatment or examination. Three such orders were issued during 1967 compared with four in 1966, eight in 1965, thirteen in 1964 and ten in 1963.

Eight persons, employees of the Provincial Department of Health and Municipal Nurses, were appointed to be Executive Officers of the Provincial Board of Health during 1967. There was one cancellation and at the year's end 45 such appointments were in effect.

During the year 128 nurses employed by Health Authorities throughout the Province were certified by the Provincial Board of Health to be capable of performing inoculations and vaccinations, in accordance with Section 41 of The Public Health Act. Eleven authorizations were returned. At the year's end 459 such authorizations were in effect compared with 342 at the end of 1966.

In addition to the regulation changes referred to earlier in this report, the Board gave consideration to several other parts of its regulations with a view to possible changes. These included the regulations in respect to swimming pools, fluid milk, mattresses and upholstery, funerals and preparation of dead bodies for interment, use

of pesticides, bathing beaches and feed lots. Also considered were proposals for regulations in respect to housing and in respect to the provision of lunch rooms and toilet facilities at construction sites. In some instances the reviews progressed sufficiently so that proposals for changes in regulations will probably be submitted to the Lieutenant Governor in Council early in 1968.

The Board continued to be interested in all aspects of air pollution and stream pollution. Discussions of items in these fields occupied portions of the various Board meetings. Instructions which had been issued to the Cities of Calgary and Red Deer in 1966 requiring additional sewage treatment were followed up in 1967. The Board also considered the need for improved sewage treatment by the Towns of Cardston and Rocky Mountain House and the townsite of Banff.

During the year 1967 a "Solid Wastes Disposal Study Committee" was established by Order in Council. This committee which includes representatives of the Departments of Health and Public Works, Cities of Calgary and Edmonton and Urban and Rural Municipal Organizations is studying waste disposal problems. The Provincial Board of Health is of course interested in the work of this committee and will be very interested in such recommendations as may be made by the committee.

The Alberta Advisory Committee on Pollution Control was also established by Order in Council during the year. This committee is advisory to the Minister of Health in all matters connected with pollution control. Naturally, its activities are also of interest to the Provincial Board of Health.

Throughout the year 1967 the Provincial Board of Health gave consideration to many other matters in the field of public health. These included provision of meat inspection, catering in schools, the sale of unwrapped bread, filtration systems at swimming pools, burning of old automobile bodies, the operation of feed lots and the use of hydrocyanic acid gas for the disposal of culled newly hatched chicks. The Board gave direction in these to Local Boards of Health and to the various Divisions of the Department of Health for the purpose of promoting an overall program which would result in improved standards of health throughout Alberta.

LEGISLATION PASSED DURING THE YEAR

The Cancer Treatment and Prevention Act, 1967 (Chapter 7)

This Act repealed and replaced The Cancer Treatment and Prevention Act, chapter 35 of the Revised Statutes but in addition to being a revision of that Act, a number of new provisions were added relating to the establishment of Provincial Cancer Hospitals.

The Lieutenant Governor in Council was given power to establish a corporation called the Provincial Cancer Hospitals Board which is authorized to own and operate cancer hospitals and out-patient clinics.

This Act came into force on April 11, 1967.

The Department of Health Act (Chapter 27)

This Act repealed and replaced the Department of Public Health Act, chapter 256 of the Revised Statutes. It is essentially a revision of that Act with the one significant

exception that by this Act the Department is divided into two sections, one for Hospital Services and the other for Health Services, and provision is made for the appointment of two deputy ministers, one Deputy Minister of Health, the other, a Deputy Minister of Hospital Services.

This Act came into force on April 11, 1967.

The Alberta Health Plan Act (Chapter 28)

The purpose of this Act is to enable all residents of the Province regardless of Income level to obtain for themselves and dependants basic health services and optional health services under a voluntary plan to provide prepaid or insurance coverage for those services. The Alberta Health Plan replaced the program under the Treatment Services Act consisting of The Alberta Medical Plan and The Alberta Extended Health Benefits Plan. Under this new legislation basic health services are extended to include certain dental, optometric, podiatric and osteopathic services. Other services will be "optional Health services" and will generally consist of what were included in Extended Health Benefits under the former program. The Minister of Health or an appointed carrier acting as his agent issues individual standard contracts for basic health services and optional health services. Only the standard contracts will be eligible for subsidies under the Act. With certain minor exceptions all group and individual contracts issued by private carriers and all self-insurance plans that provide coverage for any basic health services are required to provide coverage for at least all basic health services.

A group contract for any optional health services may be issued only for a group that also has coverage for basic health services. And by the same token, a self-insurance plan can provide coverage for optional health services only if it provides coverage for basic health services.

This Act, except section 25, came into force on April 11, 1967.

Section 25 comes into force on July 1, 1967.

The Health Unit Act Amendment Act (Chapter 29)

Section 17, subsection (3) was amended by striking out the word "annual" and by substituting the word "latest", and by striking out the words "in the calendar year preceding that in which the fiscal year begins".

Section 18b, subsection (3) was amended, first by striking out the word "annual" and by substituting the word "latest", and by striking out the words "in the calendar year preceding that in which the fiscal year begins".

This Act came into force on March 30, 1967.

The Alberta Hospital Association Act Amendment Act (Chapter 33)

Section 3 was amended by renumbering the section as subsection (1) which in turn was amended by the addition of a new clause (g) authorizing the Alberta Hospital Association to consent to be designated as an approved carrier under the Alberta Health Plan and as an approved carrier to act as the agent of the Minister of Health and to do any act that it is permitted or required to do under that Act or the regulations. The section was further amended by the addition of a new subsection (2) defining the words "other health services".

Section 5 was amended by striking out the words "prepaid hospital care" and by substituting the words "prepaid hospital services or other health services or both".

This Act came into force on April 1, 1967.

The Human Tissue Act (Chapter 37)

This Act gives a person the authority to direct that his body or any specified part or parts be used after his death for therapeutic, medical education or medical research purposes. A person may make this a binding direction if he is at least 18 years of age or over, by directing this to be done either in writing at any time or orally in the presence of at least two witnesses during his last illness.

Provision is also made for the body of a person to be given over for similar purposes, at the instance of certain other persons who may have custody of the body.

The Corneal Transplant Act is repealed.

This Act came into force on March 30, 1967.

The Medical Services (Alberta) Incorporated Act Amendment Act (Chapter 50)

These amendments give Medical Services Incorporated additional powers to enable it to participate as an approved carrier under The Alberta Health Plan Act for the purpose of providing coverage for "basic health services" which under that Act includes oral surgery performed by a dental surgeon, refractions performed by an optometrist, and the services of podiatrists and osteopathic practitioners.

Section 2 was amended by adding a new clause (e) defining "other health services".

Section 3 was amended by minor changes to clauses (a), (b), (e) and (g) to include references to "other health services" and in the case of clause (b) to include a reference to "persons who provide other health services".

Section 4 was amended as to clause (f) by adding a reference to "other health services".

A new clause (f1) gives the corporation the power to consent to being designated as an approved carrier under The Alberta Health Plan Act and as an approved carrier to whatever it is empowered or required to do pursuant to that Act.

Section 5 undergoes two minor amendments to include references to "other health services".

Section 7 was amended by the re-enactment of subsection (1) to raise the number of the membership of the board of directors from five to seven and to provide that the members shall represent certain specified interests.

Section 8 was amended, firstly as to clause (f) by adding a reference to other persons who provide health services and secondly, by the re-enactment of clause (j) to remove the limit of \$25.00 which may be paid as a fee to directors for attending meetings of boards.

Sections 9 and 10 were amended by adding a reference to a person who provides "other health services".

Section 12 was amended by adding a reference to "other health services".

This Act came into force on April 11, 1967.

The Nursing Homes Act Amendment Act (Chapter 57)

A new section 7a was added allowing the Minister to review any nursing home program a board has under consideration, if so requested by the board and to give such directions to the board for the implementation of the program as he considers proper where he concludes that the program's implementation is being delayed inordinately or requires different features.

Section 12, subsection (1) was amended by the re-enactment of clause (b) to revise the residence requirements.

This Act came into force on March 30, 1967.

The Psychologists Act (Chapter 62)

This Act replaced and repealed The Psychologists Association Act, chapter 79 of the Statutes of Alberta, 1960. It places all psychologists under The Psychologists Association of Alberta with respect to professional conduct and discipline, whether or not they are members of the association. In addition, it effects a general revision of the repealed Act.

This Act came into force on July 1, 1967.

The Public Health Act Amendment Act (Chapter 63)

A new section 42 was added making it an offence for any person to manufacture, sell, give, distribute, have in his possession, administer to himself, or to any other person, L.S.D. or any other hallucinogenic drug unless the Minister has authorized the person, who must be a qualified medical practitioner, to administer a hallucinogenic drug to himself or any other person for the purposes of research.

This Act came into force on April 11, 1967.

The Radiological Technicians Act Amendment Act (Chapter 69)

Section 12 was amended to exempt dental auxiliaries and dental hygienists from restrictions imposed by the Act, if they are acting under the direction and supervision of a duly qualified medical practitioner or a member of the Alberta Dental Association.

This Act came into force on March 30, 1967.

The Treatment Services Act Amendment Act (Chapter 85)

Section 2 was re-enacted, the definition of Minister remaining the same but new definitions being applied to the words "resident of a province" and "treatment services".

Section 3 was amended by striking out the words "a person and his dependants residing in the Province if such person" and by substituting the words "a resident of the Province and his dependants residing in the Province if such resident".

A new section 3a was added to enumerate some new circumstances under which the Minister may provide for part or all of the costs of necessary treatment services for a resident of the Province and his dependants residing in the Province.

A new section 7 was added giving the Lieutenant Governor in Council power to authorize the Minister to provide for part or all of the costs of treatment services to any class of residents in the Province specified in the order and in respect of any illness or condition which should also be specified in the order.

A new section 9 was added empowering the Minister to enter into agreements with any person or association of persons for the purpose of facilitating the provision of treatment services under this Act.

Sections 10 to 11c were repealed, effective on the commencement of the new The Alberta Health Plan Act.

Except as to the repeal of sections 10 to 11c, this Act came into force on March 30, 1967.

The Veterinary Surgeons Act Amendment Act (Chapter 90)

Section 9, subsection (3) was amended by re-enacting clause (b) to include a fine as a type of punishment which may be imposed in addition to suspension or expulsion or breaches against by-laws of the association. The section was further amended as to subsection (4) by adding after the word "suspended" the word "fined" and by adding after the word "suspension" the words "a fine".

Section 14 was amended by adding after the words "may suspend from practice" the words "or may fine".

Section 15, subsection (4) was amended by adding a new clause (c) which reads "who has been fined".

Section 16, subsection (3) was amended by adding a new clause (cl) giving a judge an appeal discretion to cancel, reduce or increase any fine which has been imposed.

This Act came into force on April 11, 1967.

In April, 1967, with the passage of the Department of Health Act, the name of the Department of Public Health was changed to the Department of Health.

Dr. M. G. McCallum retired as Deputy Minister after six years and Dr. P. B. Rose who had been acting Deputy Minister for one year became Deputy Minister of Health.

The following two new appointments were made:

Dr. W. Watt, M.B., Ch.B., D.P.H., Director
Division of Local Health Services

Mr. Léon E. Marinier
Director, Health Education Services
Division of Local Health Services.

DEPARTMENT OF HEALTH
REVENUE AND EXPENDITURE FOR FISCAL YEAR
ENDING MARCH 31, 1968

	Expenditure	Revenue
2401 Administration - General	\$ 47,299.33	\$ —
2402 Administration - General	260,919.61	3,100.92
2403 Epidemiology	14,566.90	—
2405 Vital Statistics	137,909.42	232,092.03
2408 Sundry Acts	703.65	—
2409 Civil Service Nurse	13,322.53	—
2410 Alcoholism	561,283.22	4,305.71
2411 Health Services - Extension Program	1,224,926.43	2,571,785.45
2414 Communicable Diseases	198,156.96	—
2415 Health Units and Grants for Public Health Services	2,103,766.44	899,416.22
2416 Municipal Nursing Service	140,710.92	53,963.49
2417 Dental Health Services	30,070.07	—
2418 Public Health Education	59,918.01	—
2419 Entomology and Vector Control	28,465.01	—
2420 Poison Control Services	11,770.66	—
2421 Public Health Laboratories	1,415,000.00	1,333,597.98
2422 Social Hygiene	179,440.46	96,752.43
2425 Environmental Health Services	574,706.26	250,707.11
2428 Industrial Health Services	99,353.67	3,210.00
2430 Medical Services	1,860,621.62	—
2432 Health Care Program	14,402,545.62	1,378,296.47
2433 Insulin and Other Special Drugs	63,974.76	18,354.41
2434 Emergency Air Ambulance Service	37,268.39	—
2436 Nursing Aides	772,460.52	605,763.46
2437 Laboratory and X-Ray School	38,351.05	36,093.78
2440 Poliomyelitis	100,678.91	4,022.04
2441 Medical Rehabilitation Services	3,737.15	1,448.18
2442 Cerebral Palsy Clinics	86,628.37	40,116.18
2443 Arthritis Services	21,066.41	—
2444 Multiple Handicapped Program	67,644.65	21,737.32
2450 Cancer Services	2,470,139.99	934,649.42
2478 Hospital Construction Grants	4,979,919.88	1,496,934.99
2479 Hospitalization - Nursing Homes	6,254,883.00	—
2480 Hospitalization - General	114,354,116.51	50,573,926.40
DIVISION OF TUBERCULOSIS CONTROL		
2455 Director's Office and Clinics	171,070.41	11,500.00
2456 Aberhart Memorial Sanatorium, Edmonton	1,352,955.51	575,286.90
2457 Baker Memorial Sanatorium, Calgary	1,399,617.23	387,921.40
DIVISION OF MENTAL HEALTH		
2460 Director's Office and Guidance Clinics	802,754.98	175,712.50
2463 Alberta Hospital, Ponoka	3,921,876.98	559,236.08
2465 Alberta Hospital, Edmonton	4,230,464.88	691,914.79
2467 Rosehaven, Camrose	1,131,535.43	349,002.73
2468 Alberta Hospital, Claresholm	952,454.20	150,621.74
2469 Alberta Hospital, Raymond	182,302.58	50,574.63
2472 Emotionally Disturbed Children's Program	49,721.24	4,381.00
2475 Alberta School Hospital, Red Deer	3,348,209.59	392,102.52
2477 Deerhome, Red Deer	3,415,130.02	390,078.46
	<u>\$173,574,421.43</u>	<u>\$ 64,298,606.79</u>
Total Expenditure - Health Department		\$173,574,421.43
Less Health Revenue		64,298,606.79
Net Expenditure - Department of Health		<u>\$109,275,814.64</u>

Vital Statistics

The Vital registrations during the year were as follows:

Births	30,691
Marriages	12,903
Deaths	9,523

The population for 1967 was 1,490,000 and, therefore, the following rates have been recorded:

Year	No. of Births	Birth Rate	No. of Marriages	Marriage Rate	No. of Deaths	Rate Death
1962	38,804	28.3	10,423	7.6	9,264	6.8
1963	38,467	27.4	10,163	7.2	9,444	6.7
1964	36,173	25.3	10,634	7.4	9,482	6.6
1965	32,664	22.5	11,209	7.7	9,534	6.6
1966	30,592	20.9	11,879	8.1	9,677	6.6
1967	30,691	20.6	12,903	8.7	9,523	6.4

On the whole these figures are good. The birth rate has continued to decrease. The natural increase (excess of births over deaths) was 21,168.

Alcoholism

Established April 1, 1965, as an agency of the Department of Health, the Division of Alcoholism operates out-patient clinics in Calgary, Edmonton and Red Deer, as well as "Henwood", an in-patient unit situated northeast of Edmonton.

An Advisory Council of sixteen Alberta citizens, representing all sections of the Province, assists the Director in setting Division policy and objectives.

Close liaison is maintained with other social service agencies, the medical profession, clergy and law enforcement personnel. Training programs, seminars and group discussions provide the latest information concerning alcoholism for these helping professions. Through the community services department, the Division is encouraging and assisting in the establishment of community alcoholism programs in smaller urban centres.

There were 1,142 new cases registered at the three clinics in 1967. Counselling interviews totalled 9,923, medical interviews (with either clinic nurses or physicians) totalled 7,098, and there were 873 group therapy sessions held.

Communicable Diseases

In 1967 one case of paralytic poliomyelitis without fatality was reported. This is the first case reported since 1964.

There were 13 cases of typhoid fever reported with no deaths and nine cases of diphtheria without deaths. These are substantial increases over previous years and highlight the endemic nature of these two diseases, the need

for continued vigilance and continued emphasis on immunization against diphtheria for all young age groups.

A total of 3,008 cases of measles was reported as against 6,720 cases reported in 1966. This reduction undoubtedly reflects the effect of the measles immunization program commenced in 1966.

A total of 860 cases of infectious hepatitis with four deaths was reported in 1967. This is an increase of 299 cases over 1966, but is well below the peak years of 1962 and 1963.

No cases of rabies, human or animal, were reported in 1967.

Health Units

A total of 25 Health Units are in operation in Alberta, in addition to the Local Boards of Health of the Cities of Calgary and Edmonton.

751,613 people or approximately 95% of the population residing outside the Cities of Edmonton and Calgary are served. Total grants from the Province to Health Units and City Health Departments in 1967 amounted to \$2,075,452.27.

Public Health Nursing

This branch provides consultative services to the staffs of the health units, and also is responsible for the Municipal Nursing Service.

A total of 16 nurses working in 13 municipal nursing stations throughout Northern Alberta provided a very useful and valuable service in areas where no other medical services of any kind exist.

Maternal and Child Health

The services of the Nursing Consultant continued to be in demand throughout the Province, in addition to the on-going work of helping and advising health unit and municipal nurses.

Through a Federal-Provincial Maternal and Child Health Grant, teaching equipment for prenatal classes was distributed to health units, municipal nurses and city health departments. Those health units who acquired and used the equipment reported very successful programs. It is unfortunate that a relatively small number of health units took advantage of the opportunity.

Dental Health Services

A total of 11 full-time and 14 part-time dental officers together with 27 dental auxiliaries and 17 dental assistants are employed in 21 dental health programs operated by 19 health units and two city health departments.

As of December 31, 1967, 25 communities are now operating fluoride-adjusted water systems, and in addition a further 13 communities have passed fluoridation plebiscites and were awaiting installation of the necessary equipment.

Medical Services

A wide variety of medical and para-medical treatment services are provided through this Division.

Cerebral Palsy

The Cerebral Palsy Clinic in Calgary was incorporated into the Division of Medical Services as of November 1967, for administrative simplicity and efficiency. Clinical direction remains in the hands of Dr. Margaret Pearson.

Cystic Fibrosis Program

This program now has 78 children registered with it who are receiving all antibiotic drugs and pancreatic enzymes necessary in their treatment. The cost in 1967 was \$10,968.36.

Diabetic Treatment Program

This program offers insulin and various oral hypoglycemic agents to needy diabetic patients. In 1967 a total of 1,248 patients were treated at a cost of \$44,030.34.

Emergency Air Ambulance Service

During 1967, a total of 146 flights, carrying 161 patients was made, at a cost of \$37,268.39.

Laboratory and X-Ray School

Fifteen students trained as combined Laboratory and X-Ray Technicians were graduated in 1967, bringing the total graduates to 235. The program cost \$47,362.60 during the year.

Pensioners' Medical Services

This program, which provided physicians' services for the Social Service Recipient groups, was discontinued as at 30th June, 1967, after some 21 years of continuous operation. Started in 1947 by agreement with the College of Physicians and Surgeons of Alberta, with practising members of the College providing the care, it has been an outstanding example of a successful combined effort of the medical profession and government due to mutual trust and co-operation.

Phenylketonuria Program

This program, in operation since 1960, has 13 patients receiving the necessary dietary supplement at a cost during 1967 of \$2,580.00.

Poliomyelitis Treatment Program

A total of \$10,894.91 was spent in providing the various services which are available to sufferers from poliomyelitis.

Poison Control Services

These services, formerly under the Division of Entomology and Vector Control, are now a function of the Division of Medical Services.

Registry for Handicapped Children and Adults

The registry now has over 15,000 cases registered, and the first annual lists of all cases registered in each health unit were prepared and forwarded to the health units.

The registry continues to cooperate with the Congenital Anomalies Surveillance Program in Ottawa.

Rheumatic Fever Prophylaxis Program

In operation since June, 1958, and providing penicillin free to all children up to the 18th birthday who have had rheumatic fever, this program cost a total of \$6,055.00. 280 new cases were enrolled and 4,203 continuing cases were served.

Schools for Nursing Aides

498 Certified Nursing Aides were graduated from the two schools in the Province, bringing the total graduates since the first school opened in 1948 to 7,127.

Special Handicapped Children's Program

Continuing care for six phocomelic (Thalidomide) children was provided at a cost of \$3,737.15. The Juvenile Amputee Clinics operated in Edmonton and Calgary saw a combined total of 191 review cases and 31 new cases in 1967. In addition, services were provided for certain children in the Multiple Handicapped Children's Unit at the Glenrose Hospital. The total cost of these three services was \$56,733.10.

Treatment Services for Social Service Recipients

Certain changes in methods of recording statistics will be noted.

The average monthly number of Social Service Recipients was 80,602, an increase of 6,789 over 1966. The total amounts of monies expended was \$1,777,972.54, a decrease compared to 1966 which is accounted for by the transfer of the provision of physicians' services to the Alberta Health Plan.

Environmental Health Services

This Division, formerly called the Division of Sanitary Engineering, continued and extended its work of air and water pollution control, municipal engineering, public health and plumbing inspections.

An Alberta Advisory Committee on Pollution Control, with broad terms of reference to look into and advise on all forms of pollution, air, water and soil, was established in 1967. This committee, whose members number 87 and represent all parts of the Province, had its initial meeting in October. The on-going work is carried out by five sub-committees, each one of which concentrates on one phase of pollution. The administration for the committee is lodged with this Division.

256 submissions for new or extensions to existing waterworks and/or sewerage systems were approved, and nine public and 10 semi-public swimming pools were approved for construction.

There are 25 communities fluoridating their water supply, and a further 10 communities have passed fluoridation plebiscites but have not yet commenced the actual operation.

Industrial Health Services

During 1967 a survey of 1,500 grain elevator operators was undertaken. Each worker was given a chest X-ray, spirometry and certain skin tests to determine sensitivity to various dusts to which they might be exposed. As an outgrowth of this survey, 165 workers in flour mills,

225 workers in seed cleaning and treating plants, 110 workers in feed mills, 240 highway workers and 125 foundry workers were also tested. The whole project was made possible by the co-operation of the North-West Line Elevators Association, Alberta Division, and the member elevator companies. Assistance was also provided through a research grant from the Department of National Welfare.

The normal work of this Division, the defining and assessing of industrial health hazards, and devising ways of preventing, lessening or eliminating them was carried out as well.

Tuberculosis Control

The Division of Tuberculosis Control continued its work of finding and treating new cases of tuberculosis in the two tuberculosis sanatoria, carrying on the treatment of known cases and operating the province-wide registry of tuberculosis patients. During 1967 a total of 745 new cases of tuberculosis were discovered, and in comparison with previous years it would appear that the number of new cases is levelling out with only minor fluctuations upward or downward.

Mental Health

The Alberta Guidance Clinics continued to give increasing service in their respective areas. With the increase of counselling services in schools and other welfare agencies, the cases referred to the Clinics are becoming more complicated and require more extensive investigation and treatment.

There continued to be an increasing demand for admission of patients to the facilities for the mentally retarded, both juvenile and adult.

Bursary assistance was provided to psychiatrists, psychologists and social workers to obtain specialized training. In addition, special leave for courses for nursing personnel was given.

Training programs for psychiatric nurses were increased and orientation programs provided for ward aides and attendants, as well as special courses for some persons in supervision.

Studies at the various facilities were undertaken to improve conditions for both patients and staff.

Because of changes in the physical facilities, new bed capacities were established and are as follows:

ACUTE MENTAL HOSPITALS

	Capacity	Patients in
Alberta Hospital, Edmonton	1,069	960
Alberta Hospital, Ponoka	1,065	1,141

CONTINUED TREATMENT HOSPITALS

Alberta Hospital, Claresholm	375	341
Alberta Hospital, Raymond	78	119
Rosehaven, Camrose	442	467

INSTITUTIONS FOR MENTAL DEFECTIVES

Alberta School Hospital, Red Deer	940	977
Deerhome, Red Deer	1,141	1,228

EMOTIONALLY DISTURBED CHILDREN'S UNIT

Linden House, Red Deer	25	10
------------------------------	----	----

Total	5,135	5,243
-------------	-------	-------

Alberta Health Plan

The Alberta Medical Plan which commenced on October 1st, 1963, became the Alberta Health Program on July 1st, 1966, at which time a range of Extended Health Benefits were included, the Government providing a financial subsidy towards the premium costs charged by the insuring companies for those persons in defined taxable income levels. On July 1st, 1967, the Alberta Health Plan was introduced, directly providing insured services through a government agency operated by the Alberta Health Plan Division of the Department of Health.

Hospital Services

For information regarding the Alberta hospitalization program, it will be necessary to refer to the 1967 Annual Report issued by the Hospital Services Section of this Department.

Professional and Sundry Acts

In regard to the subject of Professional and Sundry Acts, the Minister of Health is charged with the administration of the following:

- The Chiropractic Profession Act
- The Dental Association Act
- The Medical Profession Act
- The Naturopathy Act
- The Optometry Act
- The Ophthalmic Dispensers Act
- The Alberta Pharmaceutical Association Act
- The Podiatry Act
- The Veterinary Surgeons Act
- The Psychologists Act

With reference to The Podiatry Act, The Optometry Act and The Ophthalmic Dispensers Act, Boards of Examiners have been established by the Department in order to license all members who desire to practice in Alberta. Pursuant to The Chiropractic Profession Act and The Naturopathy Act, Appraisal Boards have been formed by the Department of Health in order that members wishing to practise in Alberta may be "recorded" through the Provincial Government. With regard to the other Acts, membership is obtained through the various Associations established under each respective Act. During the calendar year 1967, the Chiropractic Appraisal Board approved ten applications, and the Board of Examiners pertaining to The Optometry Act issued eight licenses. The Boards under The Naturopathy Act and The Podiatry Act did not receive any applications to review during this year. The Ophthalmic Dispensers Board of Examiners awarded one Certificate of Competency in Dispensing, rejected one candidate for lack of experience and seven more applications were still under review as of December 31, 1967. Under the same Act, this Board issued fifteen Special Certificates of Competency in Dispensing Contact Lenses, while two other applications were still under review as at the end of the calendar year.

Respectfully submitted,
P. B. Rose, M.D.,
Deputy Minister of Health.

DIVISION OF LOCAL HEALTH SERVICES

W. Watt, M.B., Ch. B., D.P.H., Director

The Division of Local Health Services is the central administrative structure for the reference of Local Boards of Health. It is composed of the following branches, each of which has its own Director and its own fiscal appropriation.

1. Communicable Diseases
2. Health Units
3. Public Health Nursing, including Maternal and Child Health
4. Dental Health
5. Health Education and Nutrition Services
6. Entomology and Vector Control

The Director of the Division of Local Health Services serves also as the Director of the branches of Communicable Diseases and Health Units. The Public Health Nursing Branch includes a Nursing Consultant in Maternal and Child Health. The Health Education Branch and Nutrition Services, while sharing a common fiscal appropriation, are separate branches, each with its own Director.

At the end of 1966 the branch of Poison Control was transferred to the Division of Medical Services and the annual report for this branch will be contained in the report of the Medical Services Division.

At the end of 1967 a decision was made to phase out the branch of Entomology and Vector Control because of overlapping of services with the facilities of the University of Alberta. From now on, studies on this subject will be the responsibility of the University who will provide for the Province the necessary reference and informational material.

The Division of Local Health Services acts in an advisory capacity to Local Boards of Health, and as the agency of the Department of Health for the payment of fiscal grants to Health Units and City Health Departments

under The Health Unit Act, and to Municipal Nursing Services under The Nursing Service Act. The professional members of the Division serve as consultants to the Medical Officers of Health and senior members of their staff. They maintain close liaison with the Division of the Department, with other Departments of the Provincial Government, with corresponding divisions of the Department of National Health and Welfare, with professional associations and voluntary agencies, and with the University of Alberta.

The Special Legislative and Lay Committee, appointed by Orders-in-Council May 1965, July 1965, and May 1966, for the purpose of studying and receiving representations and recommendations regarding preventive health services in Alberta, presented its report to the Legislature in 1967. A special three-day meeting to discuss the Committee report was called by the Minister of Health in Edmonton. Following a thorough review and discussion of the report by senior staff of Health Units and the Department of Health, and representatives of the Local Boards of Health, acceptance of the report was approved and a decision made to proceed with legislation designed to implement some of the basic and fundamental recommendations.

Miss Amy M. Elliott resigned as Director of Health Education on February 28, 1967, to accept a position with the University of Alberta, and was succeeded on October 2, 1967, by Mr. Léo E. Marinier, from the Department of Public Health in Saskatchewan.

Dr. W. Watt from the Department of Health, Province of Manitoba, was appointed Director of the Division of Local Health Services in October 1967, succeeding Dr. C. L. Pearson who, as Director of the Division of Medical Services, had also held the position of Acting/Director, Division of Local Health Services.

COMMUNICABLE DISEASES

W. Watt, M.B., Ch.B., D.P.H., Director

The functions and responsibilities of the Communicable Diseases Branch of the Division of Local Health Services include:

- (1) The collection and transmission of information and compilation and evaluation of statistics, concerning the morbidity and mortality of communicable diseases;
- (2) The provision of consultant services to local health authorities on matters relating to the prevention and control of communicable diseases;
- (3) The direction or application of control measures against communicable diseases in areas administered by the Provincial Government which are outside the jurisdiction of Health Units;
- (4) The interpretation and distribution of Communicable Disease Regulations;
- (5) The transmission of surveillance orders for smallpox and cholera to local health authorities for attention;
- (6) The transmission of bacteriological, virological and serological reports;
- (7) The distribution of immunizing antigens and sera and supervision of the utilization of those in limited supply;
- (8) The appraisal of immunization programs and the publication of specific recommendations in relation to them.

PARALYTIC POLIOMYELITIS

During the year 1967, only one case of Paralytic Poliomyelitis was reported, with no fatality. This is an increase over the years 1965 and 1966 when no cases were reported, but again indicates the efficiency of the immunization program employing Salk and Sabin vaccines.

VIRAL OR ASEPTIC MENINGITIS

There were 15 cases of Meningitis (Viral or Aseptic) reported. By way of comparison, there were 19 cases in 1966, and 51 cases in 1965. Coxsackie virus was identified in one case and ECHO virus in another.

TYPHOID FEVER

There were 13 cases of Typhoid Fever reported in 1967 with no deaths. This is a considerable increase over recent years, there being no (0) cases reported in 1966 and 7 cases in 1965. A review of the past ten years (see Table 6) indicates the endemic nature of Typhoid Fever and the need for continued precautions.

DIPHTHERIA

There were 9 reported cases of Diphtheria in 1967, but there was no fatality. The corresponding figures for the

two preceding years were 2 cases with one death in 1966, and 3 cases with no deaths in 1965. All 9 cases occurred in the rural areas of the Province, and 8 of the cases were preschool or school age children. Of very great significance is the result of investigations to determine the source of infection of the 9 cases. During the investigations a total of 335 Diphtheria Carriers were located, the great majority again being amongst preschool and school age children. Although in most instances, a highly toxic "Gravis" strain of Diphtheria bacillus was implicated, it was fortunate that no fatalities occurred. Findings such as the above indicate the continued presence and the prevalence of Diphtheria infection in the community, and should remind each resident of the need for frequent and continued immunization against Diphtheria at the young age group levels.

MEASLES

The number of Measles cases reported in 1967 was 3,008, compared with 6,720 cases in 1966, and 4,100 cases in 1965. The number of deaths from Measles was 6, compared with 4 in 1966 and 7 in 1965. The incidence of Measles in the Province is now at its lowest point in the last 10 years, and this may reflect the effect of the Measles Immunization Program commenced in 1966.

STREPTOCOCCAL INFECTIONS

The incidence of Streptococcal Infections (Scarlet Fever and Streptococcal Sore Throat) remains at approximately the same level as it has for the past seven years. The number of reported cases in 1967 reached a total of 1,700, as compared with 1,710 cases in 1966, and 1,262 cases in 1965. Several small surveys have been conducted across the Province by Health Units, and the Provincial Laboratory, to ascertain the prevalence of Streptococcal infection and study the effect of antibiotics and other control measures.

INFECTIOUS HEPATITIS

There were 860 cases reported in 1967, and there were 4 deaths. Although this would appear to be a considerable increase over the 561 cases reported in 1966, it is close to the 896 cases reported in 1965, and all three years are well below the incidence of Infectious Hepatitis reported in the peak years of 1962 and 1963.

INFECTIOUS ENCEPHALITIS

Six cases of Infectious Encephalitis were reported in 1967 as compared with one case in 1966, and 8 cases in 1965. It should again be pointed out that the morbidity and mortality statistics for this disease are rather unreliable, since diagnosed and suspected cases are frequently not confirmed virologically, and death certifications are usually unsupported by virological evidence.

RABIES

No cases of Rabies, either human or animal, were reported in the Province of Alberta in 1967.

IMMUNIZATION

A high level of immunization amongst preschool and school children against Smallpox, Diphtheria, Whooping Cough, Tetanus and Poliomyelitis is maintained by Health Units, City Health Departments, and the Municipal Nursing Service. The great majority of the children of the Province are immunized. However, the discovery of 9 cases of Diphtheria and 335 Diphtheria Carriers, mostly in the northern areas of the Province, would lead one to suspect and question the immunization status of the native Indian and Metis population.

The Measles Immunization Program commenced in 1966 for children under three years of age was extended to include all children under six years of age in 1967. The schedule which consists of three injections of "killed" Measles vaccine to be followed by one injection of "live" Measles vaccine was designed to procure a maximum degree of immunity and protection, with a minimum risk of reactions. The program was improved at the end of 1967, when Connaught Research Laboratories made available a new "inactivated" Measles vaccine, and a new product incorporating "killed" Measles vaccine with Diphtheria, Pertussis, Tetanus and Salk Polio vaccines.

The value of immunizing vaccines and sera distributed in 1967 was in the vicinity of \$260,000.00.

TABLE 1
NUMBER OF CASES OF COMMUNICABLE DISEASES
REPORTED IN THE YEARS 1966 AND 1967

	1966	1967
Brucellosis	1	—
Diarrhoea of the newborn	4	2
Diphtheria	2	9
Dysentery:		
(a) Amoebic	1	1
(b) Bacillary	300	165
(c) Unspecified	2	2
Encephalitis, infectious	1	6
Food Poisoning:		
(a) Salmonella infections	193	161
(b) Staphylococcus intoxication	11	3
(c) Unspecified	3	—
Hepatitis, infectious	561	860
Malaria	1	1
Measles	6,720	3,008
Meningitis, viral or aseptic:		
(a) Due to poliovirus	—	1
(b) Due to Coxsackie virus	2	1
(c) Due to ECHO virus	4	1
(d) Other and unspecified	13	12
Meningococcal infections	10	8
Paratyphoid fever	4	—
Pertussis	252	492
Poliomyelitis, paralytic	—	1
Psittacosis	—	—
Puerperal pyrexia	3	1
Q Fever	—	1
Rubella	840	523
Scarlet fever and streptococcal sore throat	1,710	1,700
Tuberculosis:		
(a) Pulmonary	277	269
(b) Other and unspecified	63	67
Tularaemia	1	—
Typhoid fever	—	13

TABLE 2

[illegible]

TABLE 4
COMMUNICABLE DISEASE CASES REPORTED IN 1967 BY SEX, AGE AND PERIOD OF REPORTING

	SEX		FOUR WEEKLY PERIODS												AGES								Total				
	Male	Female	1 - 4	5 - 8	9 - 12	13 - 16	17 - 20	21 - 24	25 - 28	29 - 32	33 - 36	37 - 40	41 - 44	45 - 48	49 - 52	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 39	40 - 59	60 and over	Age not stated	Cases in Armed Forces		
DIARRHOEA OF THE NEWBORN																											
Edmonton	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1
Total	2	-	-	-	-	1	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	2
DIPHTHERIA																											
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	4	5	-	-	-	-	-	-	-	-	3	2	2	4	-	-	2	3	2	1	-	1	-	-	-	-	9
Total	4	5	-	-	-	-	-	-	-	-	3	2	2	4	-	-	2	3	2	1	-	1	-	-	-	-	9
DIPHTHERIA CARRIER STATE																											
Edmonton	2	2	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-	1	2	1	-	-	-	-	-	4
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	22	7	-	-	-	-	-	-	-	-	-	-	18	6	5	-	-	10	7	5	5	2	-	-	-	-	29
Grande Prairie	1	4	-	-	-	-	-	-	-	-	-	-	-	5	5	-	2	3	-	-	-	-	-	-	-	-	5
Rural	162	135	-	2	-	-	-	-	1	-	2	25	135	132	1	34	101	79	60	19	3	-	-	-	-	-	297
Total	187	148	-	-	2	-	-	-	1	-	-	2	43	143	144	1	36	114	87	67	25	5	-	-	-	-	335

[illegible]

TABLE 4
COMMUNICABLE DISEASE CASES REPORTED IN 1967 BY SEX, AGE AND PERIOD OF REPORTING

		ENCEPHALITIS, INFECTIOUS																					
		FOOD POISONING - SALMONELLA INFECTIONS																					
Edmonton	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Calgary	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Lethbridge	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Medicine Hat	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Total	4	2	-	1	1	-	-	-	1	-	-	1	2	-	3	1	1	-	1	-	-	-	6
		FOOD POISONING - STAPHYLOCOCCUS INTOXICATION																					
Edmonton	31	39	8	4	5	4	9	7	6	8	3	3	13	28	7	3	-	10	6	3	-	-	70
Calgary	16	12	5	4	3	-	1	3	3	-	-	-	7	7	4	2	1	5	1	1	-	-	28
Lethbridge	2	1	-	-	-	-	-	-	-	-	1	1	2	1	-	-	-	-	-	-	-	-	3
Medicine Hat	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
Red Deer	3	2	1	-	1	-	-	1	-	-	-	-	2	-	2	-	-	1	2	-	-	-	5
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	28	24	7	2	3	11	2	1	5	4	4	6	8	8	5	9	2	10	4	6	-	-	52
Total	81	80	14	13	16	11	11	12	15	12	14	13	8	10	32	44	18	14	3	27	13	10	161
		HEPATITIS, INFECTIOUS																					
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	3	-	-	-	-	3	-	-	-	-	-	-	-	1	-	1	-	1	-	-	-	-	3
Total	3	-	-	-	-	3	-	-	-	-	-	-	-	1	-	1	-	1	-	-	-	-	3
		HEPATITIS, INFECTIOUS																					
Edmonton	57	58	13	7	5	11	10	8	14	12	6	12	12	5	27	27	10	35	7	3	-	-	115
Calgary	70	83	10	14	20	13	14	13	12	8	8	7	6	4	32	22	26	56	11	2	-	-	153
Lethbridge	1	4	1	-	1	-	-	-	-	1	-	-	-	1	1	-	1	3	-	-	-	-	5
Medicine Hat	2	7	1	2	1	3	-	-	1	-	-	-	-	-	1	-	2	5	-	1	-	-	9
Red Deer	12	9	1	-	1	1	3	1	4	3	2	1	1	-	2	3	4	8	4	-	-	-	21
Grande Prairie	4	3	-	-	-	-	3	1	-	-	1	2	-	1	2	3	-	-	1	-	-	-	7
Rural	258	292	47	35	23	34	38	35	31	39	41	46	35	70	153	96	49	137	34	12	-	-	550
Total	404	456	73	58	51	62	68	58	62	55	54	80	50	94	217	151	92	244	57	18	-	-	860

	SEX		FOUR WEEKLY PERIODS												AGES							Total							
			1 - 4	5 - 8	9 - 12	13 - 16	17 - 20	21 - 24	25 - 28	29 - 32	33 - 36	37 - 40	41 - 44	45 - 48	49 - 52	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 39		40 - 59	60 and over	Age not stated	Cases in Armed Forces			
	Male	Female																											
MALARIA																													
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Calgary	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-
MEASLES - WITHOUT PNEUMONIA																													
Edmonton	143	107	106	55	21	21	21	10	6	5	10	4	3	1	4	4	12	77	146	13	1	1	-	-	-	-	-	250	
Calgary	278	306	40	48	49	29	48	133	42	133	42	15	3	18	72	35	8	108	438	26	3	1	-	-	-	-	-	584	
Lethbridge	26	15	1	3	13	10	6	3	3	3	1	-	-	-	1	-	-	11	29	1	-	-	-	-	-	-	41		
Medicine Hat	44	38	3	3	5	10	18	22	13	3	3	2	-	-	-	-	4	22	54	2	-	-	-	-	-	-	82		
Red Deer	35	27	53	1	1	1	3	1	1	-	1	-	-	-	-	1	1	27	31	3	-	-	-	-	-	-	62		
Grande Prairie	64	63	30	73	13	7	1	2	-	-	-	-	-	-	-	-	2	26	91	8	-	-	-	-	-	-	127		
Rural	952	907	426	338	257	366	165	64	64	64	39	16	13	17	64	30	115	484	1,086	152	13	8	1	-	-	-	1,859		
Total	1,542	1,463	659	521	359	444	251	231	127	69	27	27	36	91	103	87	142	755	1,875	205	17	10	1	-	-	-	3,005		
MEASLES - WITH PNEUMONIA																													
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	1	-	1	-	-	-	-	-	-	-	2	-	-
Total	3	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	3	-	-
MENINGITIS, VIRAL OR ASEPTIC - DUE TO COXSACKIE VIRUS																													
Edmonton	-	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	1	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-

	SEX		FOUR WEEKLY PERIODS												AGES							Total				
	Male	Female	1 - 4	5 - 8	9 - 12	13 - 16	17 - 20	21 - 24	25 - 28	29 - 32	33 - 36	37 - 40	41 - 44	45 - 48	49 - 52	Under 1	1 - 4	5 - 9	10 - 14	15 - 19	20 - 39		40 - 59	60 and over	Age not stated	Cases in Armed Forces
POLIOMYELITIS, PARALYTIC																										
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Rural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
PUERPERAL PYREXIA																										
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1
Rural	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1
Q FEVER																										
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
Total	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
RUBELLA																										
Edmonton	42	40	8	14	6	7	7	6	3	3	5	4	3	11	5	14	23	30	10	2	3	-	-	-	-	82
Calgary	58	51	12	11	8	10	8	2	3	8	5	5	12	15	10	18	43	29	12	3	4	-	-	-	-	109
Lethbridge	9	12	1	3	2	1	5	1	2	-	2	1	1	1	2	2	7	5	3	1	3	-	-	-	-	21
Medicine Hat	5	6	1	-	1	1	1	2	2	-	-	-	1	3	-	1	3	7	-	-	-	-	-	-	-	11
Red Deer	12	14	4	4	1	4	1	1	-	2	-	3	-	3	3	8	12	3	3	-	-	-	-	-	-	26
Grande Prairie	12	9	5	6	5	3	-	-	-	-	2	-	-	-	-	2	5	11	2	-	1	-	-	-	-	21
Rural	113	140	40	23	13	28	10	11	29	7	11	13	25	21	22	49	85	70	21	15	13	-	-	-	-	253
Total	251	272	71	61	36	53	32	22	39	20	25	26	42	54	42	94	178	155	51	21	24	-	-	-	-	523

TABLE 4
COMMUNICABLE DISEASE CASES REPORTED IN 1967 BY SEX, AGE AND PERIOD OF REPORTING

SCARLET FEVER AND STREPTOCOCCAL SORE THROAT

	147	143	48	65	20	17	5	11	10	10	9	1	5	10	19	38	42	6	54	101	24	29	73	2	1	-	-	290
Edmonton	85	65	19	4	25	15	10	6	9	1	9	1	1	1	4	23	32	-	25	73	50	1	-	1	-	-	-	150
Calgary	44	59	2	3	-	1	-	3	-	-	-	-	2	8	25	34	25	1	8	64	20	5	3	2	-	-	-	103
Lethbridge	3	8	1	-	-	3	-	-	-	-	-	-	-	-	-	4	3	-	2	7	2	-	-	-	-	-	-	11
Medicine Hat	4	6	1	-	7	1	-	-	-	-	-	-	-	-	-	-	1	-	2	2	4	2	-	-	-	-	-	10
Red Deer	17	15	4	4	9	2	-	2	-	-	-	-	4	4	-	3	-	-	11	13	7	-	1	-	-	-	-	32
Grande Prairie	529	575	128	155	180	62	80	52	25	8	24	34	73	112	171	171	8	186	483	246	48	108	21	4	-	-	-	1,104
Rural																												
Total	829	871	203	231	241	101	95	74	44	9	36	57	121	214	274	15	288	743	353	85	185	26	5	-	-	-	-	1,700

TYPHOID FEVER

Edmonton	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2
Calgary	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Lethbridge	4	5	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1	2	1	3	1	-	-	9
Medicine Hat	-	-	-	-	-	-	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Total	7	6	-	-	-	-	-	2	-	8	2	1	-	-	-	-	2	-	-	1	3	1	3	2	1	-	-	13

TYPHOID CARRIERS

	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Edmonton	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Calgary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lethbridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medicine Hat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Red Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grande Prairie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rural	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1

TABLE 5
DEATHS ASCRIBED TO COMMUNICABLE DISEASES
FOR THE YEARS 1966 AND 1967

	1966		1967	
	Total Deaths	Rate per 100,000 of population	Total Deaths	Rate per 100,000 of population
Brucellosis	0	0.0	0	0.0
Diarrhoea of the Newborn	1	0.1	1	0.1
Diphtheria	1	0.1	0	0.0
Dysentery	3	0.2	0	0.0
Encephalitis	4	0.3	6	0.4
Hepatitis, Infectious	4	0.3	4	0.3
Measles	4	0.3	6	0.4
Meningococcal Infections	6	0.4	2	0.1
Paratyphoid Fever	0	0.0	0	0.0
Pertussis	0	0.0	3	0.2
Poliomyelitis, Paralytic	0	0.0	0	0.0
Scarlet Fever and Streptococcal Sore Throat	0	0.0	0	0.0
Smallpox	0	0.0	0	0.0
Tuberculosis:				
(a) Pulmonary	29	1.9	31	2.1
(b) Other and unspecified	4	0.3	2	0.1
Typhoid Fever	0	0.0	0	0.0
Population of Alberta in 1966 1,463,203			Population of Alberta in 1967 1,490,000	

TABLE 6
INCIDENCE OF SOME OF THE MORE SERIOUS COMMUNICABLE DISEASES FOR THE TEN-YEAR PERIOD, 1958 TO 1967

DIPHTHERIA				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	17	2	0.2
1959	1,243,000	10	0	0.0
1960	1,283,000	12	1	0.1
1961	1,331,944	19	0	0.0
1962	1,370,000	10	0	0.0
1963	1,405,000	29	3	0.2
1964	1,432,000	1	0	0.0
1965	1,451,000	3	0	0.0
1966	1,463,203	2	1	0.1
1967	1,490,000	9	0	0.0
MEASLES				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	3,383	4	0.3
1959	1,243,000	3,956	3	0.2
1960	1,283,000	9,279	6	0.5
1961	1,331,944	6,309	4	0.3
1962	1,370,000	10,185	5	0.4
1963	1,405,000	8,535	10	0.7
1964	1,432,000	7,860	9	0.6
1965	1,451,000	4,100	7	0.5
1966	1,463,203	6,720	4	0.3
1967	1,490,000	3,008	6	0.4
PERTUSSIS				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	684	2	0.2
1959	1,243,000	657	5	0.4
1960	1,283,000	580	3	0.2
1961	1,331,944	315	1	0.1
1962	1,370,000	980	1	0.1
1963	1,405,000	954	2	0.1
1964	1,432,000	281	3	0.2
1965	1,451,000	241	0	0.0
1966	1,463,203	252	0	0.0
1967	1,490,000	492	3	0.2
POLIOMYELITIS, PARALYTIC				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	22	1	0.1
1959	1,243,000	84	13	1.0
1960	1,283,000	201	11	0.9
1961	1,331,944	26	2	0.2
1962	1,370,000	6	0	0.0
1963	1,405,000	2	1	0.1
1964	1,432,000	1	0	0.0
1965	1,451,000	0	0	0.0
1966	1,463,203	0	0	0.0
1967	1,490,000	1	0	0.0
SCARLET FEVER AND STREPTOCOCCAL SORE THROAT				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	1,062	0	0.0
1959	1,243,000	5,132	5	0.4
1960	1,283,000	4,131	1	0.1
1961	1,331,944	1,673	2	0.2
1962	1,370,000	1,235	0	0.0
1963	1,405,000	1,153	0	0.0
1964	1,432,000	1,601	0	0.0
1965	1,451,000	1,262	1	0.1
1966	1,463,203	1,710	0	0.0
1967	1,490,000	1,700	0	0.0
TYPHOID FEVER				Mortality Rate per 100,000 of population
Date	Population	Total Cases	Total Deaths	
1958	1,201,000	6	0	0.0
1959	1,243,000	13	0	0.0
1960	1,283,000	3	0	0.0
1961	1,331,944	16	0	0.0
1962	1,370,000	8	0	0.0
1963	1,405,000	2	0	0.0
1964	1,432,000	4	0	0.0
1965	1,451,000	7	0	0.0
1966	1,463,203	0	0	0.0
1967	1,490,000	13	0	0.0

HEALTH UNITS

W. Watt, M.B., Ch.B., D.P.H., Director

Health Units were established in Alberta in 1931 with the encouragement of the Rockefeller Foundation with the specific objective of providing rural areas with preventive health services comparable to those available to the residents of the major cities.

Health Unit Services include the prevention and control of communicable diseases, including tuberculosis and the social diseases, the administration and distribution of vaccines, maternal and child health programs, school health services, health education, mental health programs, public health inspection programs and etcetera. Many Health Units have included a dental health service in their programs. Under the autonomy which each Health Unit enjoys, any program may be introduced to meet the local conditions of the region, which are deemed to be in the interest of the Health Unit.

Besides receiving consulting services from the Division of Local Health Services, Health Units are aided by the Provincial Laboratory of Public Health, the Division of Medical Services, Division of Tuberculosis Control, Division of Social Hygiene, Division of Mental Health, Division of Industrial Health Services and the Division of Public Health Engineering.

Following the introduction of the Health Unit Act in 1951, Health Units have been formed on a geographical basis such that now they are all different in size, population and costs. Some Health Units are too small to operate satisfactorily on their present economic base.

Some Health Units feel more acutely than others the difficulties of financing health programs and obtaining qualified staff. Regrouping and refinancing seems indicated in order to provide a certain basic standard service to all regions of the Province with special consideration for special "health problem" areas. Loyal public health workers who have resisted the blandishment of exotic employment opportunities in other regions could be rewarded by the security and prestige of a "Career Service."

Total financial grants from the Province to Health Units and City Health Departments in 1967 was \$2,075,452.27.

The following is a list of the Health Units, showing for each one the location of its headquarters, the population figure upon which its grant from the Department was based for the fiscal year beginning the 1st April, 1967, its approximate area and its population density:

Name of Health Unit	Headquarters	Population	Area in Square Miles	Population Density
Alberta East Central	Stettler	51,645	7,300	7.07
Athabasca	Athabasca	22,730	8,500	2.66
Banff National Park	Banff	4,101	2,600	1.18
Barons - Eureka	Coaldale	28,522	3,000	9.51
Big Country	Hanna	14,927	8,800	1.70
Chief Mountain	Cardston	9,589	1,403	7.06
Chinook	Fort Macleod	23,180	4,000	5.80
City of Lethbridge	Lethbridge	36,837	12	30.70
County of Warner	Warner	9,905	1,600	5.99
Drumheller	Drumheller	29,529	4,200	7.03
Edson	Edson	24,545	11,000	2.23
Foothills	High River	23,375	3,800	6.15
Grande Prairie	Grande Prairie	36,317	18,400	1.97
Jasper National Park	Jasper	2,902	4,200	0.55
Leduc - Strathcona	Edmonton	34,973	1,900	18.41
Medicine Hat	Medicine Hat	50,151	9,300	5.39
Minburn - Vermilion	Vermilion	29,672	5,000	5.93
Mount View	Calgary	32,563	4,300	7.57
North Eastern Alberta	St. Paul	39,699	6,000	6.62
Peace River	Peace River	35,646	26,300	1.36
Red Deer	Red Deer	69,427	4,500	15.43
Stony Plain-				
Lac Ste. Anne	Stony Plain	25,594	4,300	5.95
Sturgeon	St. Albert	55,072	3,700	14.88
Vegreville	Vegreville	30,723	3,700	8.30
Wetoka	Wetaskiwin	29,989	3,100	9.67

The categories of staff required to implement Health Unit services, and the number of positions in each category established by the end of 1967, with corresponding figures for the five preceding years, are shown in the following table:

Category of Staff	1967	1966	1965	1964	1963	1962	1961
Medical Officers	25	25	24	23	24	24	24
Dental Officers	25	21	13	13	12	9	8
Public Health Nurses....	157	151	143	136	143	138	135
Public Health							
Inspectors	37	36	37	34	34	34	34
Dental Auxiliaries	27	20	19	18	14	—	—
Dental Assistants	17	6	7	6	7	7	7
Stenographer-							
Technicians	67	60	57	55	55	52	51
Secretary-Treasurers	25	25	24	23	24	24	24

NOTE: We have nine full time dental programmes and eleven part time dental programmes in the 25 Health Units. Four Health Units offer no dental program while some units have more than one part time Dental Officer.

PUBLIC HEALTH NURSING

Janet C. Bailey, D.P.H.N., R.N., Director

The Public Health Nursing Branch provides consultative service to the staffs of the health units, particularly in regard to public health nursing program development and nursing personnel. Direct responsibility for the Municipal Nursing Service is also an important function of this Branch.

The slow continuous increase in the number of nurses employed in both the health units and municipal nursing services was maintained in 1967.

In the Municipal Nursing Service after a gradual decline over the years in the number of stations operating,

the number of nurses employed has risen to sixteen working in thirteen centres. During 1967 there was continuous service in all areas as no staff shortage was experienced. Three services, High Level, Wabasca and La Crete, which are located in the area covered by the Northern Alberta Health Services, have two nurses. In one district, Fort McMurray, a full-time clerical worker was employed to assist the Public Health Nurse. This is the first time a clerical worker has been employed in the Municipal Nursing Service.

TABLE I

DISTRIBUTION OF NURSES EMPLOYED IN HEALTH UNITS, MUNICIPAL NURSING SERVICE, AND CITY HEALTH DEPARTMENTS IN RELATION TO BASIC QUALIFICATIONS - DECEMBER, 1967

SERVICE	WITH PUBLIC HEALTH PREPARATION				WITHOUT PUBLIC HEALTH PREPARATION				TOTAL	
	Number		Percentage		Number		Percentage			
	1966	1967	1966	1967	1966	1967	1966	1967	1966	1967
Health Units	78	81	50.3	50.9	77	78	49.7	49.1	155	159
Municipal Nurses	4	5	26.7	33.3	11	10	73.3	66.7	15	15
City of Edmonton	42	50	53.2	58.1	37	36	46.8	41.9	79	86
City of Calgary	68	75	94.4	96.2	4	3	5.6	3.8	72	78
TOTAL	192	211			129	127			321	338

TABLE II

DISTRIBUTION OF NURSES IN RELATION TO POPULATION, AREA, AND POPULATION DENSITY IN HEALTH UNITS AND CITY HEALTH DEPARTMENTS ARRANGED IN ASCENDING ORDER OF POPULATION SIZE - DECEMBER 1967

Local Health Authority	Population	Area in Square Miles	Population Density	No. Health Unit Nurses		No. of Municipal Nurses	Nurse-Population Ratio
				Senior	Staff		
HEALTH UNITS							
Jasper National Park	2,829	4,200	0.67	-	1	-	1:2,829 **
Banff National Park	3,572	2,600	1.37	-	1	-	1:3,572 **
County of Warner	8,460	1,600	5.29	-	2	-	1:4,230
Chief Mountain	8,850	1,403	6.31	1	1	-	1:4,425
Big Country	14,069	8,800	1.60	1	3	-	1:3,517
Foothills	20,416	3,800	5.37	1	3	-	1:5,104
Chinook	21,481	4,000	5.37	1	3	-	1:5,370
Athabasca	21,827	8,500	2.57	1	5	2½	1:3,023 *
Edson	22,877	11,000	2.08	1	6	-	1:3,268
Stony Plain-Lac Ste.Anne	23,924	4,300	5.56	1	4	-	1:4,785
Barons-Eureka	26,256	3,000	8.75	1	4½	-	1:4,774
Drumheller	27,248	4,200	6.49	1	5	-	1:4,541
Minburn-Vermilion	28,095	5,000	5.62	1	6	-	1:4,013
Vegreville	28,652	3,700	7.74	1	6	-	1:4,093
Wetoka	29,400	3,100	9.48	1	5	-	1:4,900
Mount View	29,676	4,300	6.90	1	5	-	1:4,946
North Eastern Alberta	35,587	6,000	5.93	1	8	-	1:3,954
Leduc-Strathcona	35,996	1,900	18.95	1	6	-	1:5,142
Peace River	36,614	26,300	1.39	1	8	3	1:3,761 *
Grande Prairie	36,641	18,400	1.99	1	9½	2½	1:3,284 *
City of Lethbridge	37,022	12	3,085	1	6	-	1:5,289
Medicine Hat	48,997	9,300	5.27	1	9	-	1:4,899
Alberta East Central	50,153	7,300	6.87	-	8½	-	1:5,900
Sturgeon	52,332	3,700	14.14	1	9	-	1:5,233
Red Deer	68,464	4,500	15.21	1	11	-	1:5,705
	719,438						
CITIES							
				Dir.	Sup.	Staff	
Calgary	335,806			2	6	70	1:4,305
Edmonton	381,230			2	9	75	1:4,433
Total Population	1,436,474						

* Population reduced for ratio by subtracting population served by Municipal Nurses.

** Part-time service.

Professional Training Grants

For the university year 1966-67, twenty-one nurses received financial assistance through professional training grants to obtain qualification in public health nursing. Twenty of these attended the University of Alberta and one attended McGill University. Eleven bursary recipients obtained positions on the staffs of the health units and four returned to the staff of the City of Edmonton Health Department. No difficulty was experienced in placing all applicants within a short time of the completion of the course. Presently there are twenty-eight nurses in receipt of bursaries for the 1967-68 public health nursing course.

Senior Nurses' Workshop

From June 5th to 8th a workshop for all senior public health nurses employed in official and voluntary health agencies was held at E. A. Corbett Hall on the University of Alberta Campus. This was a joint project of the School of Nursing, the Department of Extension of the University of Alberta and the Public Health Nursing Branch. It was financed by a professional training grant from the Department of National Health and Welfare. The guest lecturer and course leader was Dr. Loretta C. Ford, Professor of Public Health Nursing, University of Colorado. Forty-one nurses attended representing eighteen health units, the Health Departments of Calgary and Edmonton, the Edmonton and Calgary branches of the Victorian Order of Nurses, and Medical Services Division, Department of National Health and Welfare. Miss Verna Huffman, Public Health Nursing Consultant, Department of National Health and Welfare, Ottawa, also attended. The workshop evaluations prepared by the participants indicated the sessions were stimulating and challenging. The topics presented included the following:

- Current and impending changes affecting public health nursing.
- Planning of change - new patterns and old problems.
- Implementing and evaluating change - Personnel and Program Management.
- Teamwork in Planning and Implementing Change.

Orientation Course in Tuberculosis Nursing

The educational program for public health nurses working in health units continued at the Aberhart Memorial Sanatorium. The course was shortened to three days and timed to coincide with the first part of the affiliation program given regularly each month to undergraduate nurses. The public health nurses received lectures on tuberculosis nursing treatment and follow up. They also had an opportunity to discuss record keeping and the operation of the Central Registry. A total of twenty-six nurses attended the six short courses held. Eight clerical workers from the health units attended a special one-day course.

As the work of the public health field staff is of great importance to successful care and treatment of tuberculosis patients, the Alberta Tuberculosis Association paid the expenses of those attending the courses. This assistance and the work of the Division of Tuberculosis Control in putting on the courses is much appreciated.

Municipal Nursing Service

Even with the continuous development of communities in northern Alberta there remain thirteen areas where the Municipal Nurses provide the only health service. In addition to the public health services, the nurses also provide a minor and emergency treatment service.

During the year there were thirteen nursing services operating in the following centres:

Atikameg - Gift Lake,	High Level -
(4 days each week),	Fort Vermilion,
Blueberry Mountain,	Kinuso,
Bonanza,	La Crete,
Calling Lake (½time),	Smith,
Fort Assiniboine,	Wabasca,
Fort McMurray,	Wanham (½ time),
	Worsley.

The Slave Lake Municipal Nursing Service and the Tangent-Eggleham Municipal Nursing Service were officially closed. In both areas the public health nursing service was continued by the health unit staffs.

The Northern Alberta Health Service which covers the large area of Alberta north of the boundaries of the health units, assisted with the supervision of four municipal nursing services located in their area. Regular visits were made by their senior public health nurse to Fort McMurray, High Level, La Crete and Wabasca. This assistance was much appreciated.

The annual Municipal Nursing Service Conference was held October 10th to 12th at the Civil Defence School in the Alberta Block. The main topics covered included the Alberta alcoholism program, the poison control program, care of infants and nursing care of arthritic patients.

TABLE III
SUMMARY OF MINOR AND EMERGENCY
TREATMENT SERVICES
BY MUNICIPAL NURSES

AGE GROUP	OFFICE		HOME	
	1967	1966	1967	1966
Infant	1,564	1,270	473	283
Preschool	2,337	2,920	856	553
School	1,116	3,396	757	519
Adult	3,474	7,387	1,716	792
Geriatric	184	327	203	149
TOTALS	8,675	15,300	4,005	2,296
			1967	1966
No. of patients referred for medical or hospital care			1,648	1,265
No. of accidents attended by Municipal Nurses			622	686
No. of home confinements attended by Municipal Nurses			10	9

Statistical information in regard to child health conferences, school health services, immunization and other public health nursing service provided by Municipal Nurses is not included here because nine of the services have the statistics for these services included in the annual reports of their respective health units.

TABLE IV
SUMMARY OF OPERATIONAL COSTS OF ALL MUNICIPAL
NURSING SERVICES

	1967	1966
Cost of drugs and medical supplies	\$ 18,252.22	\$ 19,025.85
Total fees collected—for service, drugs and medical supplies	13,841.49	13,482.04
Total cost of operation of all municipal nursing services	125,811.20	95,994.46

The Department of Municipal Affairs on behalf of the Local Improvement Districts which have Municipal Nursing Services provide 40% of the operating cost except for the Atikameg-Gift Lake and Calling Lake Municipal Nursing Services. These operate as Contract Nursing Services and as such, all costs are met by the Department of Health.

MATERNAL AND CHILD HEALTH

T. Beryl Ebert, B.Sc., R.N., Nursing Consultant

General

During 1967 the Nursing Consultant made a total of twenty-two visits to health units and municipal nursing districts. Assistance was given with staff in-service educational programs and development of nursing programs was discussed with senior nurses and medical officers. Topics that were discussed included the setting up of risk registers, poison control programs to prevent or follow-up poisoning accidents in preschool children, prenatal classes, school health services, child health conferences, postpartum hospital and home visiting, family planning and family life education programs and health education materials. A number of visits were made to provide support and consultant services to the nursing staff in the absence of the senior nurse or medical officer.

Through a Federal-Provincial Maternal and Child Health grant teaching equipment for prenatal classes was distributed to health units, municipal nurses and city health departments. The equipment consisted of teaching charts, food models, birth atlases, textbooks and demonstration equipment for a baby bath. Thirty-one sets of equipment were purchased. It was disappointing to find that only eleven health units took advantage of the opportunity to acquire equipment and new reference material.

Public health nurses in twelve health units taught prenatal classes in 1967 in one or more centres. Where classes are taught regularly they prove to be popular and well attended. There is a need to extend this service to all parts of the province. Education of pregnant women and early and continued medical care are of prime importance in reducing mortality and morbidity. Statistics show that while Canada has one of the highest standards of living, it ranks fairly low, compared to other countries, in infant and neonatal mortality rates. Segments of the population who do not make use of all available services should be encouraged through education to do so, and the same standard of service should be available to all.

National Conference on Maternal and Child Health

The first national conference on maternal and child health was held in Ottawa March 19-22nd. The conference was convened by the Department of National Health and Welfare to consider total health needs of mothers and children, to examine critically programs and services now available to meet these needs, to explore factors affecting utilization of services and to determine where changes in emphasis and organization are necessary to meet needs more effectively. In addition to providing information and inspiration the conference served an important purpose in promoting closer relationships between public health workers, clinicians, University representatives and voluntary health agencies. It is anticipated that further conferences will be held.

In preparation for the conference the nursing consultant prepared a detailed review of maternal and child health services presently available in Alberta. With the use

of questionnaires sent to health units, city health departments, hospital obstetric wards and voluntary agencies, information was obtained regarding maternal and child health services, such as prenatal classes, home visiting, child health conferences, the immunization status of children starting the first year of school, school health services, and specialized services available through the Departments of Health, Welfare and Labour.

One interesting finding was that in 1965 and 1966 only about 5% of all pregnant women in the province attended prenatal classes.

It is of some concern to find that there is a wide difference in service given by health units.

Seven delegates from this province attended the conference, representing the Provincial Department of Health, the Provincial Department of Welfare, the City of Calgary Health Department, the Health Units and the Medical Faculty of the University of Alberta.

Liaison with Other Professional Personnel

The nursing Consultant attended the annual meeting of the Maternal and Child Health Advisory Committee in Ottawa in October, as Alberta's official representative. She was also appointed to a Sub-Committee on Nursing for a three-year term. The first meeting in Ottawa was held immediately prior to the Advisory Committee meeting.

As the first concern of the Sub-Committee on Nursing it was decided to discuss the need for and provision of facilities for post-basic preparation in maternity nursing. Present facilities are considered inadequate to prepare nurses qualified to give a uniformly high standard of nursing care to maternity patients and new-born infants.

At the annual meetings of the Maternal and Child Health Advisory Committee problems of mutual concern to all provinces are discussed.

On the request of the Director of Elementary School Curriculum, Department of Education, and the publishers concerned, a careful review of elementary school health texts was made to recommend changes before they are approved for use in Alberta schools.

A condensed prenatal teaching institute was held for the public health nursing staff of the City of Edmonton Health Department. Twelve nurses attended for eight half-day sessions which consisted of lectures, films and discussions.

Miss Esther Robertson, Nursing Consultant, Child and Maternal Health Division, visited the province in December. Her visit afforded an opportunity for detailed discussion of Maternal and Child Health programs in Alberta.

Lectures were given to nurses attending the Civil Defence courses. The Nursing Consultant attended meetings of the Alberta Perinatal Mortality Committee and participated in various conferences, and workshops.

DENTAL PUBLIC HEALTH

A. T. Salter, D.M.D., D.D.P.H., Director

In the capacity of dental consultant to Health Unit Boards and City Health Departments eleven visits were made.

Permission was received to attend the following meetings:

- Advisory Committee on Dental Health, Department of Health and Welfare, Ottawa, April 21-22.
- Canadian Public Health Association Annual Meeting, Ottawa, April 25-27.
- Board of Governors, Canadian Dental Association Annual Meeting, Toronto, May 10-13.

Special permission was received to accompany two representatives of the Alberta Dental Association during a visit to the headquarters of the American Dental Association in Chicago. The main purpose was to evaluate the dental health audiovisual aids and preventive dental health education materials. Complete reports and recommendations were submitted to the Department of Health and to the Alberta Dental Association.

It was my privilege to participate on a panel at the Canadian Public Health Association, Alberta Division, Annual Convention. The paper presented was entitled "A Centennial Look at Dental Public Health". The main theme for the panel was "A Centennial Look at Public Health".

A request was received by the Department of Health to participate in the Federal Health Project No. 609-7-148, "A Survey of Dental Public Health Within the Dental Profession and Within Public Health Agencies, Including those of Government". A comprehensive report was submitted to the Chairman, Public Health Survey Committee.

A two-day course on dental public health was attended at the University of Alberta, Dental Faculty. The main clinician was Dr. David Striffler, Professor and Head of Department of Community Dentistry, University of Alberta. The theme of the course was to more effectively integrate the roles of private practice, public health and community dentistry for the benefit of the individual and the nation. This proved to be an excellent course.

A two-day meeting was attended in Edmonton. This meeting was held at the invitation of the Minister of Health to discuss with the health unit boards and representatives the Legislative and Lay Committee Report on Public Health Services in Alberta.

Two regular meetings of the Dental Technicians Board were attended in the capacity of Secretary-Registrar.

Seven candidates wrote the examinations for the Registered Dental Technician Certificate. Five were successful. There are 63 Registered Dental Technicians in Alberta.

Recruitment material for the Dental Auxiliary Training Program was revised and forwarded to all health units and city health departments to be utilized in career counselling. Many letters of enquiry from interested high school students have been received for this information.

In-service training for dental auxiliaries/hygienists and dental assistants in dental public health was undertaken.

Four, half-day meetings were held at the C.N. Tower with the average attendance being twenty-five. Appreciation is expressed to the Health Department, City of Edmonton, for the privilege of utilizing their accommodations and to Dr. T. Gavriloff, Director, Dental Health, City of Edmonton, and to Dr. P. Finnigan, Dental Officer of Health, Stony Plain-Lac Ste. Anne Health Unit for instigating these in-service sessions.

DENTAL HEALTH PROGRAMS
Permanent Staff at December 31, 1967

Health Unit	DENTAL OFFICERS		Dental Auxiliary/ Hygienist	Dental Assistant
	Full-Time	Part-Time		
Athabasca		1	2	
Banff National Park		2		
Barons-Eureka	1			1
Big Country	1			
Drumheller	1 D.D.P.H.		1	1
Edson			1	
Grande Prairie	1			
Jasper National Park		3		
Leduc-Strathcona		1	1	
City of Lethbridge		1	1	
Medicine Hat	1			1
Minburn-Vermilion		1	1	
Mount View	1 D.D.P.H.		2	1
North Eastern Alberta		1	1	1
Peace River		2	2	
Red Deer	1		2	1
Stony Plain-Lac Ste. Anne	*1	(1 acting)	1	1
Sturgeon	*1	(1 acting)	1	
Vegreville		1	1	1
CITIES				
Edmonton	1 D.D.P.H. (1 Clinical)		7	5
Calgary	1 D.D.P.H. (4 Clinical)		3	4
	11 D.O.H. 5 Clinical	14	27	17

*Two dental officers of health are being sponsored under the Professional Training Grant to attend the Dental Public Health Diploma Course, University of Toronto.

Dental Preventive Health Services

Preventive dental health programs were established in two health units during 1967:

Minburn-Vermilion, May 1967

Part-time dental officer of health and a full-time dental hygienist (graduate from the Dental Auxiliary Training Program, 1963), were appointed.

Big Country Health Unit, June 1967

Full-time dental officer of health appointed.

There are 19 preventive dental health programs established as an integral health unit service within the 25 health units. Nine programs are directed by full-time dental officers of health and 10 are supervised by part-time dental officers. Seventeen Dental Auxiliary/Hygienists, graduates of the Dental Auxiliary Training Program are employed within the 19 health units. Two of the full-time dental officers of health have their Diploma in Dental Public Health.

The Cities of Edmonton and Calgary, each has a full-time dental director possessing his D.D.P.H. Ten Dental Auxiliary/Hygienists are employed by the cities. Seven of these are graduates from the Dental Auxiliary Training Program.

**DENTAL AUXILIARY TRAINING PROGRAM
PROFESSIONAL TRAINING GRANT PROJECT #608-2-188
SUMMARY AT DECEMBER 31, 1967**

	Graduated	Presently Employed		
		Health Units		City Health Departments
Course #1 (1961-63)	19	7	5	2
Course #2 (1962-64)	18	3	1	2
Course #3 (1963-65)	10	5	2	3
Course #4 (1964-66)	8	6	6	
Course #5 (1965-67)	4	3	3	
	59	24	17	7
Course #6 (1966-68)	11 expected to graduate May, 1968 (one student has accepted bursary for second year only).			
Course #7 (1967-69)	8 expected to graduate May, 1969.			

Oral Fluoride Program November 1966 to January 31, 1968

Total Bottles of Tablets Ordered to Date	50,000 (bottles of 100 tablets)
Total Bottles of Liquid Ordered to Date	48,000 (1 ounce bottles)
Tablets shipped to Cities and Health Units	36,834
Liquid shipped to Cities and Health Units	33,250
Tablets dispensed by Cities and Health Units	27,626 (bottles of 100)
Liquid dispensed by Cities and Health Units	22,122 (1 ounce bottles)

Volunteer Private Practice Programs

Communities Requesting Program	Date of Clinic
Ft. McMurray	January 26 - February 4
Consort	February 13 - March 4
Bonnyville	July 5 - July 31
Oyen	August 14 - September 29
High Level	August 14 - August 26
Grand Center	October 30 - November 11
Slave Lake	December 6 - December 16

The clinical services were made available to these rural areas for a total of 125 working days.

In 1961 the Provincial Department of Health in association with the Alberta Dental Association established a program to provide dental services to those areas where dental care services were not otherwise available. These programs are conducted on a private practice basis and the transportable dental equipment is made available on loan by the Department. Mileage and transportation costs are underwritten by the Department.

From January 1, 1961, to December 31, 1967, a total of 84 Volunteer Private Practice Programs have been

undertaken, by members of the Alberta Dental Association in co-operation with the Department of Health.

Third Year Dental Student Summer Program

Chinook, Big Country and Jasper National Park employed third year dental students during the summer months.

Two third year dental students participated at High Level, Paddle Prairie, La Crete, and Wabasca under the auspices of the Northern Field Work Summer 1967 Program. This program was under the direction of Dr. S. Greenhill, Professor and Head, Department of Community Medicine, University Hospital, Edmonton. Portable dental equipment from the Department was made available for this project.

These summer programs were preventive and educational in nature. The services were extended to the pre-school and elementary school age groups. Emergency dental treatment was made available to the communities. Dental prophylaxis and topical fluoride applications were offered together with parent counselling and referral to the private practitioner where indicated. These short term programs were well received by the communities.

Dental Health Seminars

Under the sponsorship of the Federal Government Project No. 608-13-17 the Public Health Committee of the Alberta Dental Association in cooperation with the Provincial Department of Health presented five dental health seminars during 1967.

Vermilion	— January 25, 1967
Medicine Hat	— February 20, 1967
Grande Prairie	— October 11, 1967
Fairview	— October 11, 1967
Elk Point	— November 29, 1967

The physical arrangements were undertaken by the dental and medical staffs of the health units. Excellent cooperation and assistance was received from the teaching staff. Each seminar was included as part of the regular curricula of the day for the elementary, junior and senior high students. In excess of 5,000 students and their teachers received the preventive dental health lectures. The most up-to-date films and slides were utilized by the clinicians during the presentations.

Appreciation is expressed to Dr. G. Clarke, Alberta Dental Association; Dr. W. Simpson, Faculty of Dentistry, University of Alberta and Dr. P. Finnigan, Stony Plain-Lac Ste. Anne Health Unit for their participation as the main clinicians.

The continuation of these seminars from year to year has proven beneficial to the clinicians in developing methods of presentation and enlarging the scope of the audiovisual materials available for the seminars. Guidance and encouragement is given to the dental personnel of the health units to offer similar presentations in their areas to better the oral health of the children today and in the future as adults.

Controlled Fluoridation in Alberta as of December 31, 1967

There are 23 communities with fluoride-adjusted water systems supplying 25 communities with a total

population of 476,937 representing 45.5% of the population served by piped water systems and 32.6% of the population of Alberta. An additional 35,900 persons are using waters with natural fluoride contents of more than 0.9 parts per million.

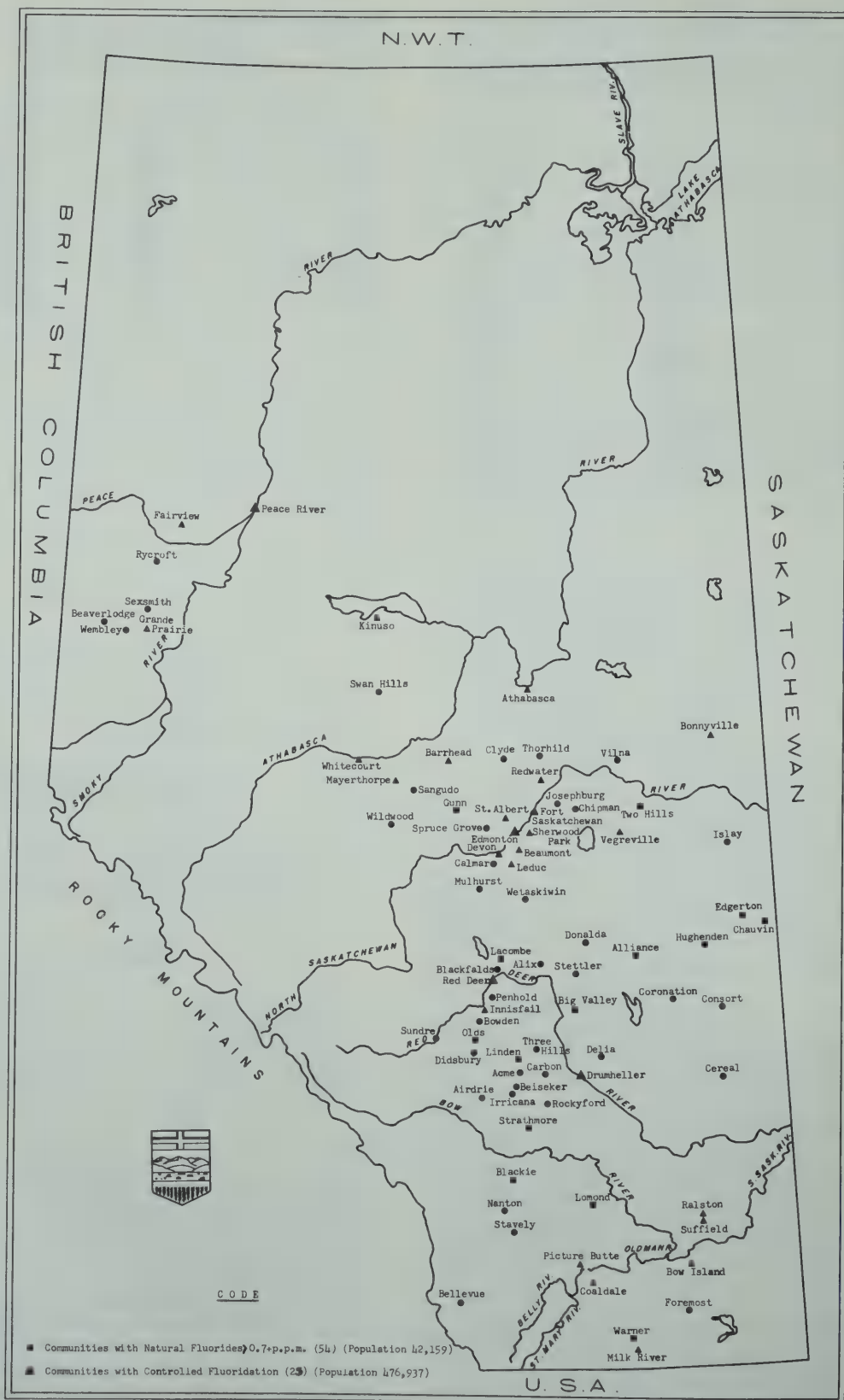
	Date Commenced	Population 1967
Fairview	1958	1,884
Red Deer	1958	26,173
Devon	1959	1,283
Grande Prairie	1959	11,417
Innisfail	1960	2,531
Bonnyville	1961	2,275
Athabasca	1962	1,672
St. Albert	1962	9,828
Fort Saskatchewan	1962	4,277
Leduc	1962	3,029
Beaumont	1962	194
Coaldale	1963	2,541
Peace River	1963	5,024
Suffield-Ralston	1963	2,000
Barrhead	1964	2,718
Kinuso	1964	376
Mayerthorpe	1964	961
Milk River	1964	861
Redwater	1964	1,041
Whitecourt	1965	2,502
Picture Butte	1966	1,013
Drumheller	1967	3,574
Edmonton	1967	381,230
Sherwood Park	1967	5,000
Vegreville	1967	3,533
		<hr/> 476,937

Fluoridation Plebiscites

Twelve fluoridation plebiscites were held during 1967; 6 received the necessary majority vote.

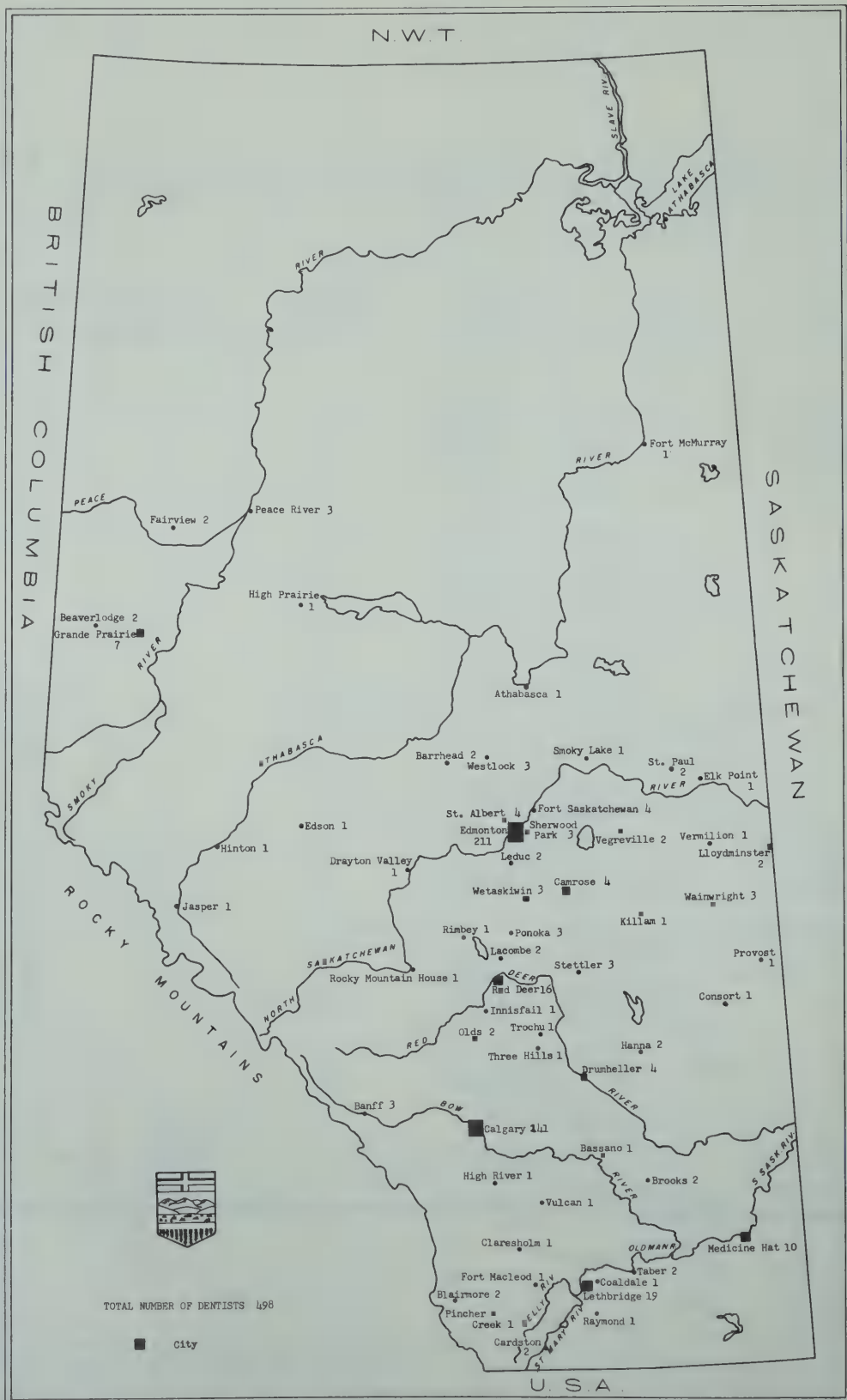
SUCCESSFUL PLEBISCITES — AWAITING INSTALLATION

Community	Population (1967)	Date of Plebiscite
Spirit River	1,136	April, 1958
Bow Island	1,160	October, 1964
Drayton Valley	3,352	October, 1966
Elk Point	775	October, 1966
St. Paul	3,655	October, 1966
Cardston	2,721	October, 1966
Hanna	2,633	October, 1966
Hays	705	February, 1967
Hinton	4,461	October, 1967
Pincher Creek	3,118	October, 1967
Westlock	2,792	October, 1967
Grand Center	1,746	October, 1967
Taber	4,561	October, 1967
	<hr/> 32,815	



DISTRIBUTION OF DENTISTS IN RELATION TO POPULATION, AREA, AND
POPULATION DENSITY IN HEALTH UNITS AND CITY HEALTH
DEPARTMENTS ARRANGED IN ASCENDING ORDER OF POPULATION SIZE

Local Health Authority	Population	Area in Square Miles	Population Density	Number of Dentists	Dentist/Population Ratio
HEALTH UNITS					
Jasper National Park	2,829	4,200	0.67	1	1:2,829
Banff National Park	3,572	2,600	1.37	3	1:1,190
County of Warner	8,460	1,600	5.29	1	1:8,460
Chief Mountain	8,850	1,403	6.31	2	1:4,425
Big Country	14,069	8,800	1.60	3	1:4,519
Foothills	20,416	3,800	5.37	2	1:10,208
Chinook	21,481	4,000	5.37	5	1:4,296
Athabasca	21,827	8,500	2.57	1	1:21,827
Edson	22,877	11,000	2.08	3	1:7,939
Stony Plain-Lac Ste. Anne	23,924	4,300	5.56		
Barons-Eureka	26,256	3,000	8.75	3	1:8,752
Drumheller	27,248	4,200	6.49	6	1:4,541
Minburn-Vermilion	28,095	5,000	5.62	6	1:4,682
Vegreville	28,652	3,700	7.74	2	1:14,313
Wetoka	29,400	3,100	9.48	7	1:4,200
Mount View	29,676	4,300	6.90	2	1:14,838
North Eastern Alberta	35,587	6,000	5.93	4	1:8,895
Leduc-Strathcona	35,996	1,900	18.95	9	1:3,999
Peace River	36,614	26,300	1.39	6	1:6,102
Grande Prairie	36,641	18,400	1.99	9	1:4,071
City of Lethbridge	37,022	12	3,085.	19	1:1,948
Medicine Hat	48,997	9,300	5.27	13	1:3,769
Alberta East Central	50,153	7,300	6.87	8	1:6,269
Sturgeon	52,332	3,700	14.14	9	1:5,815
Red Deer	68,464	4,500	15.21	20	1:3,423
	719,438				
CITIES					
Calgary	335,806			141	1:2,382
Edmonton	381,230			211	1:1,902
Total Population	1,436,474			496	



HEALTH EDUCATION SERVICES

Léo E. Marinier, Director

The Director's position was vacant from February 28, 1967, to October 2, 1967, when the present Director was appointed. The past three months were spent becoming familiar with the duties and performance standards of the position and the general administration of the department. Also as part of the Director's orientation contact was made with a number of agencies: Alberta Tuberculosis Association, Alberta Safety Council, Mental Health Association, Cancer Society, YMCA's Family Life Education Council, National Film Board, Alberta Heart Foundation, Arthritis and Rheumatism Society. After existing programmes were reviewed, preparations were made to initiate new programmes in the coming year.

Basic to all planned programmes in public health is the educational component which meets specific health needs. This Branch endeavors to make its full resources available in an advisory capacity to all health units, city health departments, divisions of this department, voluntary health agencies throughout the Province, as well as other government departments which have similar goals. The Director is asked to serve on a number of committees — some of these are long term and continuing, while others are short term and terminate with goal accomplishment. Those committees on which the Director serves presently include the following: Western Canada Farm Safety Conference Planning Committee, Voluntary Advisory Committee to Health Careers Recruitment, Federal-provincial Committee on Health Education, Poison Control Advisory Committee, Alberta Advisory Committee on Pollution Control, Technical Advisory Committee on Health Education Research Concerning Smoking and Health, Health and Physical Education Advisory Committee (Y.M.C.A.), Western Provinces Health Education Institute, Cancer Education Committee. Although, not an active member of other committees, but by virtue of their health oriented goals the Director provides help to the chairmen and members — such is the case with the Committee on Misuse of Drugs and Narcotics and the Family Life Education Sub-Committee. He also works and maintains liaison with his counterparts at the University and the Provincial and Federal Governments. Furthermore, to keep abreast of changes in public health education, close contact is also maintained with professional colleagues through professional memberships, literature, journals, attendance at provincial and national conferences and personal contact.

During 1967, the major project which the Branch undertook was the planning of a province-wide poison control programme. To date a 20-minute, 16mm, coloured

film entitled **Poisons** was produced in Alberta. It was filmed under the supervision of the Director of Medical Services of this Department in co-operation with personnel from the University of Alberta. The coloured film will augment the Provincial Poison Control Programme which is scheduled to start in early 1968.

In addition, plans have been initiated to produce two poison control pamphlets which will accompany table top displays now in production. The exhibits will be based on the theme of one of the pamphlets entitled **10 Little Tasters** and geared to both preschoolers and their parents. Along with this packaged programme will be several short TV-clips produced to be televised on all the television stations in Alberta.

At the request of the appropriate divisions a number of publications have been revised or printed and plans made to revise others in the coming year. The publications revised were: As Boys Grow, Alberta Guidance Clinics, Your Health Unit, Cerebral Palsy Clinic, Confidentially to Teenagers, Alberta Mental Health Services and Supplement to the Health Education Film Guide.

During the year there were 7800 bookings of the 750 films in the Provincial Health Education Film Library. These films were booked and sent out directly through the Film and Photo Branch in response to requests from schools, hospitals, health units, city health departments and interested community groups. It is estimated that the films were shown approximately 10,000 times to a possible audience of 180,000. The groups of films that proved most valuable were the following: Child Health, Physiology, Mental Health, First Aid and Safety, Chronic Diseases. The groups that used the audio-visuals most frequently were schools, health units, schools of nursing, municipal nurses, voluntary associations and the Department of National Health and Welfare. During the year 15 films were previewed on a variety of subjects. Twenty older films were reviewed with department personnel and were retired because of age.

The Director gave presentations to the Municipal Nurses' Conference and a United Church Youth Group. Plans are underway to meet requests for presentations next year.

As noted earlier, for the major part of the year the Branch was without a Director, and the position of Assistant Director remained vacant, this left the work load to the existing staff who should be commended for a job well done.

NUTRITION SERVICES

Elva M. Perdue, B.Sc. (H.Ec.), B.Ed., Nutritionist

During 1967, professional education and consultation services continued to be the most important phases of the program of Nutrition Services. Although some direct services were provided by this office, individuals and groups were reached mainly through professional personnel such as health unit staff, hospital and institutional personnel and teachers, among others.

The disruption of routine caused by two office moves in 1967, together with the limited staff of one nutritionist and one clerk-typist precluded a substantial extension of the basic service which is carried out from year to year. However, in addition to the usual activities which have been reported in previous annual reports, there was an increased emphasis in some areas as well as a number of additions to the basic program. In this report, only the more time consuming activities and the extended services are listed.

Consultant Services to Public Health Personnel

1. Forty-one letters and more than 50 phone calls were answered from public health nurses. Both general and specific nutrition information, as well as material on therapeutic diets, were provided.
2. The nutritionist participated in five staff conferences of public health personnel at the invitation of the medical officers or senior nurses to discuss nutrition topics that were requested.
3. A family food inventory record was planned for use in a medical and dental survey conducted on the Gift Lake Metis Colony by the staff of the Peace River Health Unit.
4. Three dental auxiliaries were assisted in planning and preparing dental nutrition exhibits for use in offices and clinics.

Consultant Services to Institutions

1. The nutritionist reviewed and prepared written reports on 85 weeks of menus from 16 nursing homes at the request of the Deputy Minister of Hospital Services in the Department of Health.
2. Five nursing homes were visited at the request of personnel in the Nursing Homes Branch of Hospital Services. The staff was assisted with organization and dietary problems.
3. Job descriptions were drafted for dietary technicians in Provincial Institutions of various sizes.
4. Twenty-one requests were answered from personnel in small institutions. Information and materials were provided on quantity food preparation, food purchasing and therapeutic diets.
5. Information on child feeding was supplied to day care centres, nursery schools and head start programs. Assistance was also given in planning and costing menus.

Services to Other Government Departments and Agencies

1. The Alberta Government Telephones' emergency

food plan was reviewed and revised to comply with the current food tenders in use at the Provincial Institutions and to include menus and items needed for the preparation and service of food.

2. With the Supervisor of Women's Extension Services in the Alberta Department of Agriculture, the nutritionist served on a committee to prepare the annual revision of the food allowance scales used in the social assistance programs of the Department of Public Welfare.
3. The nutritionist assisted in planning the curricula and course content for a three-week Dietary Training Course sponsored jointly by the Alberta Hospital Association and the Southern Alberta Institute of Technology. She was also responsible for 34 of the 84 lecture hours and prepared eleven teaching aids for use in these presentations.
4. The nutritionist served on a committee to review and report on the Correspondence Course For Dietary Training offered by the Correspondence Instruction Branch of the Southern Alberta Institute of Technology.
5. Meetings of the Advisory Committees for the Dietary Service Technology Programs offered at both the Southern and the Northern Alberta Institutes of Technology were attended. Teaching aids and resource materials were also made available for these courses and, in addition, the nutritionist assisted with the practical examinations given to candidates seeking admission to the Phase B or one-year program at N.A.I.T.

Services in the Field of Education

1. The nutritionist collaborated with Mrs. June Frache on the nutrition section of the school health textbook, "FITNESS FOR LIVING", by Frache and Brown. She also reviewed and reported on the nutrition information in three other health texts written for school use.
2. A start was made on nutrition teaching aids suitable for health classes in the primary grades. These have been requested by teachers and public health personnel.
3. Nutrition information was supplied in letters sent to 91 teachers, including 36 home economics and vocational food teachers, as well as to 30 home economists. In addition, information on equipment, films and reference materials was sent to 25 dietitians.
4. The objectives and activities of Nutrition Services were outlined to key groups of students, including public health nurses, student nurses, dental auxiliaries and dietary technicians. Assistance was also given to 17 students from these fields in planning lectures, demonstrations and teaching aids in connection with nutrition assignments.

5. A two-hour lecture on food budgeting was presented to the public health nursing students at the University of Alberta.
6. Student public health inspectors were assisted with the nutrition section of their correspondence course.

Direct Service to the General Public

Information was supplied in response to letters and telephone enquiries from the public-at-large concerning general nutrition, food purchasing, budgeting and therapeutic diets. There were some 25 referrals from private physicians and nurses for patient counselling on therapeutic diets, and numerous requests were received from individuals for recipes suitable for use in special diets prescribed by physicians. The greatest number of the latter were for gluten-free, sodium restricted and altered fat, although, interestingly enough, there were six requests for recipes for phenylketonuria diets.

Miscellaneous

1. Nine groups were given assistance in planning market

orders and menus for use in their bus trips to and from Expo. Similar assistance was given to six groups planning summer camps.

2. A report was given to the Edmonton Nutrition Committee on the Canadian Public Health Association Convention and the Dominion Provincial Nutrition Committee Meetings which the nutritionist attended in Ottawa. She also made arrangements for speakers for three other meetings of the Edmonton Committee.
3. A paper was presented at the February meeting of the Calgary Home Economics Association.
4. Twenty-nine films were previewed and assessed for their suitability for inclusion in the Health Education Film Library.
5. Eighteen reports on nutrition topics were prepared for government offices, organizations and individuals. A number of these entailed considerable research in professional journals and scientific literature.

ENTOMOLOGY AND VECTOR CONTROL

J. H. Brown, B.Sc., M.Sc., F.A.P.H.A., M.R.S.H., F.R.E.S., (Lon.), Director
and

J. A. Marken, B.Sc., Biologist

Entomology and Vector Control is responsible for the locating of, and the control of arthropod-borne diseases of man and their reservoirs of infection in native small mammals, with particular attention being paid to Rocky Mountain Spotted Fever, Colorado Tick Fever, Bubonic Plague, Tularaemia, Encephalomyelitis, and other less well-known conditions, which are of public health importance. Other problems, such as fly and mosquito control, the use of insecticides, insect infestation in food-stuffs and insect pests of institutions, also fall within the work of the Division. Furthermore, a considerable amount of time is devoted to determining the distribution and species of the insects, ticks and mites that are involved in the transmission of human diseases. A number of other biological problems such as the control of leeches and Swimmers' itch, the evaluation of pesticides as a public health hazard and vermin control are also included.

ROCKY MOUNTAIN SPOTTED FEVER TICK SURVEY

The Rocky Mountain Spotted Fever tick, *Dermacentor andersonii* is well-established in Alberta. Its known and supposed range embraces all of that part of Alberta south of a line from Empress west to Calgary, and thence north and west in the foothills and mountains north to Fort St. John, B.C.

Collections — During 1967 good progress was obtained during the annual Rocky Mountain Spotted Fever survey with 33 ticks collected from hosts and 208 ticks from drag making a total of 241 ticks. All of these collections were sent to Dr. J. A. McKiel, Zoonoses Laboratory, Ottawa, for bacteriological examination but no positives were obtained.

Rocky Mountain Spotted Fever — During 1967 there were no reported cases of Rocky Mountain Spotted Fever, although several ticks were removed from the bodies of humans by physicians and were submitted by us to the Zoonoses Laboratory, Ottawa, for testing in suckling mice and guinea pigs. Positive results were not obtained. However, it is known that infected ticks and reservoirs of infection are present at Medicine Hat, Lethbridge, Milk River, Manyberries, Brooks, Kananaskis and Banff.

Vaccinations — During 1967 a total of 1,389 doses of Rocky Mountain Spotted Fever vaccine were given in the Medicine Hat, Lethbridge, Milk River, Manyberries, Brooks, Kananaskis and Banff areas. Ralston gave a separate count of 560 doses making a grand total of 1,949 given.

Tick Paralysis — In April, 1967, a case was clinically diagnosed at the Ponoka Alberta Hospital of a woman patient, age 71, who had been visiting relatives in the Merritt, Summerland and Penticton areas of British Columbia. After the tick was removed and treatment administered, the patient's paralysis and fever began to diminish. In June, 1967, a second case involved a 4½-year-old Indian child who was admitted to the Macleod

Hospital. She had loss of appetite, was restless, irritable, clumsy and unstable on her feet. After an engorged live tick was removed from the child's head, her condition improved gradually and she was discharged on the fifth day.

BUBONIC PLAGUE SURVEY

Two very large areas of Plague infection, one centering on Hanna and the other on Brooks exist in Alberta. In both areas, plague-infected Ground Squirrels (gophers) and plague-infected Ground Squirrel fleas have been collected.

There are also other species of fleas in Alberta which are capable of transmitting plague from infected animals to man. Fortunately, most of these species are not very numerous, and in many cases the distribution is limited. During the 1967 Plague Survey 78 fleas were taken from such animals as the Pocket gopher, Chipmunk, Striped Ground squirrel, and Richardson Ground squirrel collected at St. Albert, Elk Island Park, Oyen, Hanna, Rocky Mountain House, Ardrossan and Peace River. All collections were sent to Ottawa for bacteriological examination but the results were negative.

FLY CONTROL

A program of Fly Control within Health Units was continued during 1967 based mainly on adequate sanitation and proper garbage disposal, and aided by chemical spraying. This program was developed in this Division several years ago and is based on the fact that spraying for fly control in small towns is very costly. The program still appears to be well accepted.

MOSQUITO CONTROL

Mosquitoes did not present a very serious problem in 1967. However, they constituted a nuisance at most of the summer resort areas. Since the establishment of the Provincial Parks, there has been a very great demand in all parts of the province for local mosquito control programs, but, unfortunately, mosquito control in such small areas is expensive and ineffective unless a definite long range program embracing a number of such places is undertaken.

SCHISTOSOMIASIS

Swimmers' itch is a condition caused by the penetration of the skin by a small fork-tailed parasite (*cercariae*). In man it always follows bathing or swimming in infested lakes or ponds and is characterized by a localized area of very itchy wheals.

Snails, which are the host for the cercariae, are sensitive to Copper sulfate, and under certain conditions, small quantities of it in the water will poison them. As this has to be done at least once a week it becomes an expensive control. This same chemical is also toxic to fish and unless properly applied can have a very adverse effect on the fish population. Furthermore, there is a grave danger that the accumulation of this toxic chemical in the water will present a hazard to the general public.

Practically all of the snail species present in Alberta carry the parasite. The degree of infestation varies within the species depending upon whether the snails are present in lakes or semi-permanent or permanent sloughs. It has been determined that the abundance of snails can be related to the type, or types, of aquatic vegetation present. This is considered to be highly significant, as a probable control could be developed through the destruction of the aquatic weeds which supply shelter and food to the snails.

General – During 1967 many calls were received in the Division from people requesting information on the control and treatment of Swimmers' itch. Advice was given over the telephone, and a mimeographed sheet on the treatment and control was sent. All cases were advised to consult their doctor.

WESTERN EQUINE ENCEPHALITIS

Studies were continued in 1967 on the arbovirus vector species of mosquitoes that were found to be present in Alberta in all areas north of the Red Deer River in which light traps were established, and also on the WEE virus that was recovered from poultry sentinel flocks, wild bird bloods, and small mammal bloods in the same areas.

Most of the field work in 1967 involved the collecting of blood and tissue specimens from wild birds, small mammals, and domestic poultry flocks. A total of 122 tissue specimens and 25 blood samples were collected from native small mammals, 97 blood specimens and 24 tissue specimens were taken from wild birds, and 91 blood samples from random poultry flocks in Alberta. From these specimens a positive for WEE was obtained from a turkey blood that was collected at Hanna on July 22, 1967.

There was a low incidence of reported WEE cases in Alberta during 1967. This low incidence is probably directly connected with the low mosquito population that resulted from the warm, dry summer.

LEECHES

Leech infestations were reported from many Alberta lakes during 1967 and appropriate advice was given. It is evident that leeches will become a serious problem at many of the resort areas now being developed, particularly in regard to the wading areas, and the operators of resort areas are still very much concerned about the problem.

HARVEST ITCH

Harvest itch is a skin condition somewhat similar to scabies and is caused by mites. The mites involved are normally on such vegetation as grain and grasses and are accidentally transferred to the person of harvesters and others handling such materials, particularly in the fall and winter. The necessary advice for controlling outbreaks was given to the Health Units and local medical practitioners during 1967.

Q FEVER

In 1967 the Q Fever Survey was carried on in co-operation with the Provincial Laboratory of Public Health and the Dairy Bacteriology Laboratory, Department of Agriculture, and demonstrated the presence of the organism in dairy herds in various parts of the province.

The following are the results obtained from milk samples received at the Provincial Dairy Laboratory and submitted by Dr. V. W. Kadis, Director, for the period from December 1, 1966, to November 30, 1967.

SAMPLES TESTED

Total Number of Milk Samples Tested	6,160
Negative Samples	5,624
Positive Samples	536
% Positive Samples	8.70

SOURCES OF SAMPLES

	Total	Negative	Positive	% Positive
Edmonton Area	1,913	1,831	82	4.29
Calgary Area	422	344	78	18.48
Lethbridge-Medicine Hat Area	729	524	205	28.12
All other areas	3,096	2,925	171	9.45

As in previous years, it still is observed that once a herd becomes infected, it usually remains infected.

LABORATORY

Insect Identifications – During 1967 a large number of insects from different products and places were received for identification. Insects from tropical and semi-tropical areas continue to be found in Alberta. From the increase in their numbers, and as they are plant-eating insects, it would appear that the increase may be directly connected with the vanning-in of fruit and vegetables from the southern United States, Mexico, and Central America. Suitable information for control measures was supplied to the public, local Sanitary Inspectors, and City Health personnel.

Insect Collections – Good progress was made in 1967 in establishing a reference collection of insects and ticks injurious to human health.

Water Samples – During 1967 many of the samples of water from reservoirs, domestic water supplies, lakes, etc. sent in from the Health Units were found to contain Algae, Chromogenic bacteria, cecariae, and small aquatic insects. Information regarding these conditions was given by letter or telephone.

STAFF

The Branch was saddened by the death of its Director, Mr. J. H. Brown, on December 5, 1967. Mr. J. A. Marken, Biologist, continued as Acting Director.

DIVISION OF MEDICAL SERVICES

C. L. Pearson, B.Sc., M.D., D.P.H., Director

The Division of Medical Services is the administrative structure of the Department of Health concerned with medical and para-medical treatment services. The branches of this Division are as follows:

1. Emergency Health Services
2. Special Handicapped Children's Programs
3. Registry for Handicapped Children and Adults
4. Cystic Fibrosis Program
5. Diabetic Treatment Program
6. Phenylketonuria Program
7. Rheumatic Fever Program
8. Emergency Air Ambulance Service
9. Poliomyelitis Treatment Program
10. Treatment Services for Social Service Recipients
11. Schools for Nursing Aides
12. Registry for Nursing Aides
13. Health Careers Recruitment Program
14. Laboratory and X-Ray School
15. Northern Alberta Health Services
16. Cerebral Palsy Clinic
17. Poison Control Service
18. Alberta Health Program

In the administration of the various programs operating through the Division of Medical Services, the Division becomes involved with the following Acts: The Treatment Services Act, The Poliomyelitis Sufferers Act, The Nursing Aides Act, The Health Unit Act, The Public Health Act, The Medical Profession Act, The Nursing Service Act, The Civil Defence and Disaster Act, The Alberta Hospitals Act, The Homestead Lease Loan Act, The Motor Vehicle Accident Claims Act, The Chiropractic Profession Act, The Naturopathy Act, The Optometry Act, The Ophthalmic Dispensers Act, The Podiatry Act, The Public Welfare Act.

EMERGENCY HEALTH SERVICES

This organization is responsible to the Minister of Health through the Division of Medical Services and its functions are twofold:

1. To establish a system of Emergency Health Services throughout the province to meet a National Emergency and to provide the necessary medical care for the maximum portion of the population.
2. To assist and advise all Active Treatment Hospitals in the province in the preparation of a Disaster Plan to meet with any national disaster and to test the efficiency of this Plan.

The Acting Director was A. W. Mann, Ph.C., the Pharmacist Supplies Officer. Associated with him were two Nurse Consultants, a Stores Officer and two Clerical Staff.

All phases of the Emergency Health Services programme, planning, training, stockpiling and orientation, showed progress. Ten Hospital Disaster Exercises were held. A total of 78 hospitals have conducted Disaster Exercises. Eight hospitals have conducted two or more Hospital

Disaster Exercises. The 200-bed Emergency Hospital was used for three Training Exercises and public displays.

Twenty Casualty Collecting Units were allocated to Alberta. All these were prepositioned. Twenty Advanced Treatment Centres were Alberta's allocation. Twelve have been prepositioned. Of the twenty Emergency Hospitals allocated, twelve had been prepositioned.

Twenty-eight Emergency Health Services courses were held throughout the province. Lectures were given in all the Nursing Schools, to Emergency Measures courses at the Civil Defence School, to St. John Ambulance, Dental Hygienists and three Home and School Associations.

Disaster Planning Meetings were held with the Executive Directors of the Active Treatment Hospitals in Edmonton, the Northern Zone Medical Director, the Edmonton City Area Medical Director and the Superintendent of Emergency Measures Organization, City of Edmonton. Cost of this service amounted to \$54,312.45 during the year.

SPECIAL HANDICAPPED CHILDREN'S PROGRAMS

Provision is made under the Treatment Services Act to cover these programs, which include the Thalidomide Program, the Multiple Handicapped Children's Unit at the Glenrose Provincial General Hospital, and the Juvenile Amputee Clinics.

The Department continued certain responsibilities, authorized in October of 1963, concerning six children with full Phocomelic deformities, possibly due to thalidomide, and the cost of this program during the year amounted to \$3,737.15.

The Juvenile Amputee Clinics, which were established at the University of Alberta Hospital, Edmonton, in June of 1964 and the Alberta Children's Hospital, Calgary, in December of 1965 continued on a consultative basis to children who were not over the age of 17 and who suffer an amputation, congenital or traumatic.

During the calendar year, ending December 1967, the Edmonton Juvenile Amputee Clinic examined 122 patients of whom 21 were new patients and 101 were review cases. The Clinic in Calgary examined 100 patients of whom 10 were new patients and 90 review cases. The total cost to the Division of operating the Juvenile Amputee Program and a Multiple Handicapped Unit at the Glenrose amounted to \$56,733.10.

REGISTRY FOR HANDICAPPED CHILDREN & ADULTS

The Registry, which is now in its 5th year of operation, has over 15,000 registered cases. Since our policy continues to be that of voluntary rather than compulsory registration, the case load will not likely represent 100% registration of handicapped people throughout the province. However, due to the excellent co-operation of the Health Units, C.N.I.B., and various special

clinics and other organizations, we continue to receive new registrations at a rate of about 250 per month.

While confidentiality is strictly maintained regarding names and addresses of registrants, information is released from time to time regarding special handicaps when requests are received from research students, special clinics or other legitimate sources of enquiry.

The Registry has continued to co-operate with the Congenital Anomalies Surveillance program in Ottawa.

The first annual lists of all cases registered in each Health Unit were prepared last year and forwarded to the Health Units. This proved helpful to the staff in making them aware of cases, registered by other sources, of which they were not aware. It also proved helpful to the Registry, as Health Units returned up-dated information regarding the listed cases.

The staff is now in the process of recording all anomalies in accordance with the new International Classification of Diseases, adapted for use in the U.S. (ICDA).

Cost of operating the Registry amounted to \$10,911.55 during the fiscal year.

The Registry continued to be a liaison between individuals and Health Unit Staff members, and special clinics and resources for the care of the handicapped. The Director has spoken to groups of Public Health Nurses, informing them of the nature and functions of the Registry.

CYSTIC FIBROSIS PROGRAM

The program commenced in May of 1964 and was established to provide antibiotic drugs and pancreatic enzymes necessary for the treatment of children suffering from this condition. This action was deemed necessary because of the high cost of this often life-saving treatment which was beyond the means of many.

A child is registered on this program by his or her physician, using criteria recommended by the Special Drugs Advisory Committee. The drugs are provided free of charge and without a means test to child registrants up to the eighteenth birthday. Seventy-eight children were receiving these drugs during the calendar year 1967 and the expenditure incurred by the Department amounted to \$10,968.36.

DIABETIC TREATMENT PROGRAM

The Department of Health provided, without charge, insulin to diabetics who are residents of the Province of Alberta. The program commenced in 1927, and treatment is provided through a means test upon application by the patient through his or her own physician. In 1959, the program was expanded to provide an oral hypoglycemic medication "tolbutamide" for those persons capable of being treated with this drug instead of insulin. In June, 1962, "phenformin" was included under this program for patients in whom it was demonstrated would produce better control. In November, 1965, "chlorpropamide" was added for the same reason. Several patients are being treated with combinations of these drugs.

TABLE 1
PERSONS USING INSULIN, TOLBUTAMIDE, PHENFORMIN
AND CHLORPROPAMIDE

Year	Insulin	Tolbutamide	Phenformin	Chlorpropamide	Total
1959	314	81			395
1960	334	188			522
1961	345	272			617
1962	321	362	22		705
1963	342	445	51		838
1964	374	478	65		917
1965	414	524	96	8	1,042
1966	365	602	135	34	1,136
1967	418	596	172	62	1,248

In 1967, the cost of the insulin program amounted to \$20,233.24, tolbutamide \$17,644.00, phenformin \$5,387.10 and chlorpropamide \$746.00 making a total expenditure for the purchase of diabetic drugs of \$44,030.34.

PHENYLKETONURIA PROGRAM

The Special Drug Program included the treatment of phenylketonuria in 1960. This is a congenital defect found in a very small percentage of new-born infants which results in mental deficiency if not treated early with special dietary preparations. These preparations are provided free of charge and at present thirteen patients are in receipt of such aid under this program, which cost the Division \$2,580.00.

RHEUMATIC FEVER PROGRAM

This program was started in June, 1958 to provide penicillin free to all children with rheumatic fever up to their eighteenth birthday. For approved patients, 200,000 units of penicillin twice daily is provided. For any patients who are sensitive to penicillin, a triple sulpha preparation is provided as an alternate prophylactic in the dosage of one 7½ grain tablet twice daily. In 1967, 24 patients were receiving the triple sulpha, while 1,672 patients were receiving penicillin and the cost of the program amounted to \$6,055.00.

TABLE 2
TOTALS OF NEW APPLICATIONS
AND FOLLOW-UP SUPPLIES

Year	Application Approved and First Supply Sent	Follow-up Supplies
1958*	494	250
1959	433	1,545
1960	391	2,933
1961	383	2,708
1962	336	3,518
1963	266	3,953
1964	334	3,991
1965	352	4,322
1966	341	4,371
1967	280	4,203
Total	3,610	31,794

* Figures are for June 30th, 1958 to December 31st, 1958 only

EMERGENCY AIR AMBULANCE SERVICE

This emergency service has been in operation since 1959 and during the twelve-month period ending December 31, 1967 provided 146 flights. During the fiscal year the total cost of the program amounted to \$37,268.39. Seriously ill or injured patients in inaccessible areas are transported to hospital by chartered aircraft, usually with a physician in attendance. If the patient can be transported satisfactorily by automobile, ambulance or rail, the air service is not available. In 1967 provision was established under this Service to permit reimbursement to qualified escorts for travelling expenses.

TABLE 3
PARTICULARS CONCERNING
EMERGENCY FLIGHTS

Year	Flights	Patients	Adults	Children	Premature Infants*
1959	55	53			
1960	44	52	32	20	
1961	50	50	31	19	13
1962	76	83	50	33	14
1963	76	78	51	27	5
1964	96	107	63	44	3
1965	127	137	92	45	6
1966	109	118	90	29	5
1967	146	161	109	52	4

* Premature infant totals included with children

POLIOMYELITIS TREATMENT PROGRAM

Under the provisions of The Poliomyelitis Sufferers Act and Regulations, residents of Alberta who suffer from poliomyelitis and its subsequent effects may obtain such treatment services as in-hospital medical services subsequent to the fourteen-day isolation period of the acute phase, surgical services, and indicated respirator care from the day of onset of the disease. Orthopaedic appliances and other assessment procedures are also available. Occupational and out-patient speech therapy may be provided.

Poliomyelitis admissions to hospital and hospital days are as follows:

TABLE 4
HOSPITAL DAYS & ADMISSIONS, 1963-1967

Year	Isolation	Post Isolation	Respirator	Total	Admissions
1963	6	5,830	6,382	12,218	216
1964	nil	4,211	5,474	9,685	170
1965	nil	3,136	5,040	8,176	134
1966	nil	3,065	4,825	7,890	103
1967	nil	2,437	4,022	6,459	80

TABLE 5
PROVINCIAL EXPENDITURES FOR POLIOMYELITIS TREATMENT SERVICES,
1963 - 1967-68

Expenditure	1963	1964	1965	1966	1967-68
Post isolation days @ 60¢	\$ 3,498.00	\$ 2,526.60	\$ 1,881.60	\$ 1,839.00	\$ 1,341.00
Respiratory days @ \$1.50 *	12,764.00	8,895.50	7,560.00	7,237.50	5,473.50
Surgical procedures	22,265.35	21,724.95	14,578.20	16,014.20	18,446.00
Medical advisor	2,400.00	2,400.00	2,400.00	2,400.00	2,400.00
In-patient appliances	30,296.91	20,441.69	8,263.84	756.37	723.50
Out-patient appliances	5,826.39	21,358.13	24,442.05	25,990.72	34,905.51
Physiotherapy	1,878.20	1,897.00	1,323.20	21.15	
Muscle tests	128.50	125.50	74.00		
Radiology	2,812.00	2,946.00	1,404.50	8.00	
Other (Cast Room, etc.)	170.90	236.94	80.85	8.00	
Home care program equipment	334.00		4,510.55		7,605.40
Totals	\$82,374.25	\$82,552.31	\$66,518.79	\$54,274.94	\$70,894.91

* The fee for Respirator Days was reduced from \$2.00 to \$1.50 per day, effective April 1, 1964

TREATMENT SERVICES FOR SOCIAL SERVICE RECIPIENTS

The Treatment Services Act makes provision for treatment services for the Social Service Recipient Group. These services include Dental, Optical and Chiropractic, as well as certain other limited services pertaining to Physiotherapy and Podiatry, which are only provided when prior approval of the Director, Division of Medical Services is obtained. Medical services were also included under this program until June 30, 1967 when at that time the Social Service Recipients Group came under the Alberta Health Plan. Hospitalization is provided through Hospital Services pursuant to the Alberta Hospitalization Benefits Plan.

At the time the medical services were transferred to the Alberta Health Plan, it was decided to change the method of recording statistics under the Social Service Recipients Group as follows:

1. Government Child Wards
2. Aid to Dependent Children
3. All other Social Service Recipients

As a result of this change, the statistical tables pertaining to this program have been amended to record the information in accordance with the new breakdown.

TABLE 6
AVERAGE NUMBER OF SOCIAL SERVICE
RECIPIENTS FOR THE YEARS
1963, 1964, 1965, 1966, 1967

Year	Government Child Wards	Aid to Dependent Children	All Other Social Service Recipients	Total
1963	3,489		59,533	63,022
1964	3,489	186	64,205	67,880
1965	3,717	316	68,223	72,256
1966	3,984	419	69,505	73,908
1967	4,054	446	76,102	80,602

During the calendar year 1967, the average monthly number of Social Service Recipients in the province amounted to 80,602, which was an increase of 6,789 over the calendar year 1966. Provincial expenditures for treatment services, on behalf of Social Service Recipients in the calendar year 1966 was \$2,941,261.67 compared to \$1,777,972.54 in 1967-68 indicating a decrease of \$1,163,289.13. The decrease in the total expenditure for 1967-68 is the result of the Alberta Health Plan taking over the payment of certain medical care expenditures as from July 1, 1967.

Including the payments which the Division of Medical Services made to the College of Physicians & Surgeons for the period April 1, 1967, until the termination of the

Agreement, June 30, 1967, the per capita expenditure for the Social Service Recipient Group during the year amounted to \$22.07, as compared to \$39.99 in the previous year. The reduction is brought about by the termination of the Agreement with the College of Physicians & Surgeons. The per capita payment to the Alberta Dental Association amounted to \$11.11 per year, and to the Alberta Chiropractic Association \$1.99. As the programs relating to Government Child Wards and Aid to Dependent Children do not include Chiropractic Services, the per capita payment is based on an average monthly number of 76,101 recipients.

TABLE 7
PROVINCIAL EXPENDITURES BY TYPE OF SERVICE
FOR YEARS 1966 AND 1967-68

Type of Service	1966	1967-68	Increase or Decrease
Medical care	\$2,105,272.00	\$ 575,460.00	-\$1,529,812.00
Dental care	552,487.77	895,844.70	+ 343,356.93
Optical & optometric services	184,582.45	164,760.09	- 19,822.36
Chiropractic services	97,548.45	141,147.75	+ 43,599.30
Other treatment services	1,371.00	760.00	- 611.00
Total	\$2,941,261.67	\$1,777,972.54	-\$1,163,289.13

1. Medical Care for Social Service Recipients

Through an agreement between the Department of Health and the College of Physicians and Surgeons of Alberta, the practising members of the College provided complete medical care for the Social Service Recipient Group up until the agreement terminated on June 30, 1967 when the Social Service Recipients came under the Alberta Health Plan. The payment made by the Department to the College of Physicians and Surgeons amounted to \$30.00 per capita per year, and this payment was deposited in the "Pensioners' Medical Fund", which was administered by the College of Physicians and Surgeons. Administrative costs of this program, by the College of Physicians and Surgeons, was considered to be 4% of the assessed value.

Physicians' accounts were assessed according to the Schedule of Fees of the College of Physicians and Surgeons, and initial payment, based on 50% of the minimum fees, is made. The remainder of the fund was pro-rated upon termination of the agreement, in June 1967, according to the assessed value of the accounts submitted and a final payment was awarded in 1967. The province paid the College of Physicians and Surgeons \$575,460.00 for medical services for the period April to June, as compared to an expenditure of \$2,105,272.00 for the entire year of 1966.

DEPARTMENT OF HEALTH

TABLE 8
SOCIAL SERVICE RECIPIENT'S MEDICAL SERVICES UTILIZATION
April 1, 1967 - June 30, 1967

Type of Service	Recipient		Spouse		Child	
	No. of Services	Fee	No. of Services	Fee	No. of Services	Fee
GROUP "A"						
Office						
First	1,862	\$ 15,369.00	246	\$ 2,292.00	80	737.00
Minor	6,943	32,798.00	1,101	5,249.00	551	2,692.00
Repeat	12,271	34,448.00	1,537	4,509.00	335	1,034.00
Referred	190	860.00	28	145.00	1	5.00
Routine Medical	184	669.00	12	71.00	8	45.00
House	2,910	14,093.00	121	611.00	26	145.00
N. H. E.	1,134	10,233.00	96	714.00	53	433.00
Detention Fee	53	412.00	-	-	-	-
Hospital, Active	45,681	89,771.50	3,151	6,924.00	601	1,481.00
Referred	1,837	6,661.00	245	671.50	8	36.00
Chronic	10,447	18,846.30	178	324.00	-	-
Mileage	67	367.00	-	-	-	-
Certificate	74	311.00	7	58.00	4	24.00
Consultation	1,219	16,612.00	117	1,759.00	31	420.00
Laboratory	5,790	14,179.00	893	2,189.00	130	292.50
Minor Procedures	781	1,064.00	69	152.00	6	5.00
Obst. & Gyn.	60	4,508.00	21	1,600.00	5	155.00
General Surgery	1,185	35,867.82	131	4,517.00	62	1,083.00
Ortho. Surgery	294	20,201.00	59	1,890.50	10	327.50
Neuro. Surgery	29	955.00	1	30.00	1	30.00
Urology Surgery	318	13,195.50	17	1,030.00	5	45.00
Otolaryngology	145	1,499.00	30	472.00	31	609.00
Eye	798	17,784.50	98	1,861.00	44	712.00
Plastic Surgery	17	1,290.00	3	400.00	2	150.00
Internal Medicine	1,043	8,193.50	127	927.50	9	105.00
Psychiatry	180	1,601.00	19	134.50	32	305.00
Paediatrics	-	-	-	-	7	78.00
Dermatology	344	1,070.00	20	95.00	67	197.50
Physiatry	3	45.00	-	-	-	-
X-ray	2,581	28,321.83	361	4,325.00	115	1,104.00
Anaesthesia	713	19,359.50	70	2,139.00	26	505.00
Surgical Assistant	168	3,793.00	21	513.00	3	60.00
Total	99,321	\$414,378.45	8,779	\$45,603.00	2,253	\$12,815.50
Average cost per service		\$4.17		\$5.19		\$5.69
Average cost per individual covered		\$4.78		\$4.07		\$3.37
GROUP "B"						
Office						
First	681	\$ 5,060.00	138	\$ 1,234.00	100	\$ 907.67
Minor	2,756	12,664.00	789	4,078.00	943	4,709.00
Repeat	5,036	14,029.00	1,121	3,103.00	592	1,684.00
Referred	78	336.00	4	20.00	4	20.00
Routine Medical	59	147.00	9	51.00	16	75.00
House	423	2,065.00	82	393.00	70	351.00
N. H. E.	273	2,445.00	63	473.00	59	593.67
Detention Fee	43	347.00	2	17.00	1	5.00
Hospital, Active	10,765	21,595.50	1,849	3,783.00	1,005	2,938.00
Referred	560	1,824.50	22	82.00	86	249.50
Chronic	2,070	3,504.00	73	144.00	7	14.00
Mileage	78	109.00	2	-	1	-
Certificate	24	92.00	4	28.00	1	5.00
Consultation	477	6,535.00	83	1,156.00	46	636.00
Laboratory	2,000	5,176.00	464	1,289.50	325	774.50
Minor Procedures	331	499.50	42	80.00	44	50.00
Obst. & Gyn.	29	2,665.00	55	4,513.00	11	405.00
General Surgery	374	12,225.84	107	3,090.50	55	1,363.00
Ortho. Surgery	108	7,018.00	11	915.00	26	1,197.50
Neuro. Surgery	17	1,380.00	1	100.00	1	5.00
Urology Surgery	99	3,551.49	15	295.00	9	165.00
Otolaryngology	33	1,087.00	9	296.00	46	1,657.50
Eye	223	3,826.00	47	467.00	71	1,454.00
Plastic Surgery	8	770.00	3	150.00	3	305.00
Internal Medicine	269	2,317.50	46	491.00	11	115.00
Psychiatry	282	2,172.50	49	405.00	8	80.00
Paediatrics	1	10.00	-	-	12	131.00
Dermatology	297	633.00	82	189.00	115	381.50
Physiatry	6	90.00	-	-	-	-
X-ray	1,028	11,135.50	210	2,645.00	176	1,460.46
Anaesthesia	300	8,036.00	112	2,236.50	88	1,732.50
Surgical Assistant	58	1,271.00	18	528.00	9	186.00
Total	28,786	\$134,617.33	5,512	\$32,252.50	3,941	\$23,650.80
Average cost per service		\$4.68		\$5.85		\$6.01
Average cost per individual covered		\$5.80		\$5.30		\$1.88

TABLE 8
SOCIAL SERVICE RECIPIENTS MEDICAL SERVICES UTILIZATION
April 1, 1967 - June 30, 1967

Type of Service	Recipient		Spouse		Child	
	No. of Services	Fee	No. of Services	Fee	No. of Services	Fee
GROUP "C"						
Office						
First	698	\$ 5,778.00	13	\$ 118.00	550	\$ 5,030.00
Minor 1	2,585	12,181.00	30	149.00	3,410	16,321.00
Repeat	2,420	7,010.00	64	208.00	1,944	5,907.00
Referred	19	95.00	1	5.00	11	55.00
Routine Medical	44	343.00	1	3.00	44	205.00
House	145	814.00	2	14.00	363	1,671.00
N. H. E.	150	1,389.00	2	20.00	257	2,420.00
Detention Fee	32	225.00	-	-	15	75.00
Hospital, Active	2,173	5,299.50	112	254.50	3,051	8,552.00
Referred	114	477.00	-	-	293	888.00
Chronic	90	181.00	23	46.00	2	4.00
Mileage	1	5.00	-	-	11	17.00
Certificate	13	98.00	-	-	27	110.00
Consultation	290	3,657.00	13	237.00	286	3,457.00
Laboratory	1,996	5,239.50	78	173.50	1,223	2,799.50
Minor Procedures	256	328.00	22	23.00	105	172.00
Obst. & Gyn.	293	16,103.00	1	200.00	48	1,119.00
General Surgery	252	9,304.00	4	230.00	320	5,863.00
Ortho. Surgery	54	2,448.50	1	10.00	52	1,962.00
Neuro. Surgery	17	460.00	-	-	15	305.00
Urology Surgery	26	370.00	2	40.00	41	1,212.50
Otolaryngology	33	585.00	-	-	200	5,551.50
Eye	168	2,169.00	5	50.00	339	4,217.00
Plastic Surgery	5	245.00	-	-	7	600.00
Internal Medicine	129	1,098.50	4	30.00	50	513.00
Psychiatry	354	3,064.17	-	-	118	998.00
Paediatrics	3	34.00	-	-	97	1,018.00
Dermatology	215	684.50	13	19.50	454	1,246.50
Physiatry	1	15.00	-	-	-	-
X-ray	720	9,046.50	5	40.00	572	5,468.50
Anaesthesia	352	7,242.50	3	100.00	293	5,269.00
Surgical Assistant	53	1,253.00	1	20.00	19	416.00
Total	13,701	\$97,242.67	400	\$1,990.50	14,217	\$83,442.50
Average cost per service		\$7.09		\$4.98		\$5.88
Average cost per individual covered		\$5.36		\$8.51		\$1.63
GROUP "D"						
Office						
First	330	\$ 2,599.00				
Minor 1	1,047	4,787.00				
Repeat	722	2,031.00				
Referred	-	-				
Routine Medical	133	576.00				
House	226	1,433.00				
N. H. E.	84	843.00				
Detention Fee	6	45.00				
Hospital, Active	1,451	3,377.00				
Referred	115	438.00				
Chronic	20	40.00				
Mileage	2	-				
Certificate	7	39.00				
Consultation	127	1,724.00				
Laboratory	301	785.90				
Minor Procedures	31	97.00				
Obst. & Gyn	9	660.00				
General Surgery	132	2,442.00				
Ortho. Surgery	23	1,325.00				
Neuro. Surgery	17	1,185.00				
Urology Surgery	19	505.00				
Otolaryngology	56	1,174.50				
Eye	118	1,582.00				
Plastic Surgery	6	460.00				
Internal Medicine	12	140.00				
Psychiatry	361	3,186.00				
Paediatrics	166	1,703.00				
Dermatology	107	435.00				
Physiatry	-	-				
X-ray	200	2,087.00				
Anaesthesia	122	2,590.00				
Surgical Assistant	9	272.00				
Total	5,959	\$38,561.40				
Average cost per service		\$6.52				
Average cost per individual covered		\$3.13				

DEPARTMENT OF HEALTH

TABLE 8
SOCIAL SERVICE RECIPIENTS MEDICAL SERVICES UTILIZATION
April 1, 1967 - June 30, 1967

Type of Service	Recipient		Spouse		Child	
	No. of Services	Fee	No. of Services	Fee	No. of Services	Fee
GROUP "E"						
Office						
First	10	\$ 100.00				
Minor 1	92	434.00				
Repeat	35	112.00				
Referred	-	-				
Routine Medical	-	-				
House	4	26.00				
N. H. E.	2	25.00				
Detention Fee	2	10.00				
Hospital, Active	50	153.00				
Referred	-	-				
Chronic	-	-				
Mileage	-	-				
Certificate	-	-				
Consultation	3	45.00				
Laboratory	21	38.50				
Minor Procedures	1	1.00				
Obst. & Gyn.	-	-				
General Surgery	11	464.00				
Ortho. Surgery	-	-				
Neuro. Surgery	-	-				
Urology Surgery	-	-				
Otolaryngology	5	145.00				
Eye	6	60.00				
Plastic Surgery	-	-				
Internal Medicine	2	30.00				
Psychiatry	10	135.00				
Paediatrics	-	-				
Dermatology	1	5.00				
Physiatry	-	-				
X-ray	10	117.00				
Anaesthesia	8	155.00				
Surgical Assistant	2	40.00				
Total	275	\$2,095.50				
Average cost per service		\$7.62				
Average cost per individual covered		\$1.73				
GROUP "F"						
Office						
First	4	\$ 34.00				
Minor 1	20	100.00				
Repeat	15	43.00				
Referred	-	-				
Routine Medical	1	7.00				
House	1	7.00				
N. H. E.	1	10.00				
Detention Fee	-	-				
Hospital, Active	5	19.00				
Referred	-	-				
Chronic	-	-				
Mileage	-	-				
Certificate	-	-				
Consultation	1	15.00				
Laboratory	4	15.50				
Minor Procedures	1	-				
Obst. & Gyn.	1	10.00				
General Surgery	1	-				
Ortho. Surgery	-	-				
Neuro. Surgery	-	-				
Urology Surgery	-	-				
Otolaryngology	1	60.00				
Eye	-	-				
Plastic Surgery	-	-				
Internal Medicine	-	-				
Psychiatry	4	60.00				
Paediatrics	-	-				
Dermatology	9	12.00				
Physiatry	-	-				
X-ray	1	18.00				
Anaesthesia	3	60.00				
Surgical Assistant	-	-				
Total	73	\$470.50				
Average cost per service		\$6.44				
Average cost per individual covered		\$3.65				

2. Dental Services for Social Service Recipients

On behalf of the Social Service Recipients, the per capita payment in 1967 to the Alberta Dental Association amounted to 90 cents per month. Routine dental care is provided to all Social Service Recipients and with the exception of the Government Child Wards and Aid to Dependent Children Groups, two-thirds of the cost of new dentures is provided. Posterior bridge work is not provided. However, special dental and orthodontic care for the Government Child Wards and Aid to Dependent Children may be authorized.

During the fiscal year 1967-68, the Government of the Province of Alberta paid to the Alberta Dental

Association, for dental services, an amount of \$895,844.70 compared to \$552,487.77 in 1966. This represents an increase of \$343,356.93 or 62.1%.

Dental Statistics by Group, of the Pensioners' Dental Service for the Year 1967

This statistical summary was compiled from the treatment records of those persons receiving treatment under the Pensioners' Dental Service during the period of January 1st to December 31st, 1967. The number of eligibles used as a base for calculation in this table was obtained by averaging the counts of beneficiaries in each category contained in the monthly reports issued by the Welfare Department.

TABLE 9
SOCIAL SERVICE RECIPIENTS UTILIZATION OF DENTAL SERVICES BY GROUPS - 1967

Type of Recipient	Average Number Eligible	Number Receiving Treatment	Percent of Participation	Disbursements Per Group	Average Cost Per Treated Person
Government Child Wards	4,044	1,480	36.6%	\$ 56,369.45	\$38.09
Aid to Dependent Children	438	137	31.3%	5,228.35	38.16
All Other Social Service Recipients	76,120	18,213	23.8%	769,096.01	42.23
TOTAL	80,602	19,830	24.8%	\$830,693.81	\$41.89

3. Optical Services for Social Service Recipients

The total of all services under the program for glasses in 1967 amounted to 13,823 accounts, at a cost of \$164,760.09. This represents an increase of 2,944 services, as well as an increase of \$59,278.14 in payments.

Comparative data for eligible recipients is shown in the following table:

TABLE 10
SOCIAL SERVICE RECIPIENTS - UTILIZATION AND COSTS OF OPTICAL SERVICES, 1961 - 1967-68

Year	Average Number of Recipients	Number of Services	Percentage of Recipients Obtaining Services	Total Cost of Services	Average Cost Per Service
1961	50,459	8,338	16.5	\$ 82,287.13	9.88
1962	57,639	8,617	14.9	82,350.03	9.44
1963	61,450	10,569	17.2	106,364.89	10.06
1964	65,455	9,638	14.7	92,010.61	9.54
1965	69,895	11,242	16.1	105,652.39	9.40
1966	73,812	10,879	14.7	105,481.95	9.69
1967-68	80,602	13,823	17.1	164,760.09	11.92

The number of recipients obtaining services was 35.1 percent higher than in 1966, and the cost per service was \$2.23 higher. The total payments to optometrists represented \$27,743.00 for 2,984 services, a decrease of \$51,357.50 in payments and a decrease of 6,142 in services. Effective July 1, 1967, the payment of eye examinations became the responsibility of the Alberta Health Plan, consequently, this is the reason for the reduction in the number of services during the year under review. Optometrists received \$6.50 for a vision examination and \$2.50 for a fitting fee if carried out, making a total of examination and fitting

\$9.00. Payment to the medical eye specialist was included in the Agreement for Social Service Recipient medical care through the College of Physicians & Surgeons.

4. Chiropractic Services for Social Service Recipients

The Agreement which the Department of Health has with the Alberta Chiropractic Association makes provision for chiropractic care to all Social Service Recipients, except those relating to Government Wards and Aid to Dependent Children. The total payment to the Alberta Chiropractic Association in 1967-68 amounted to \$141,147.75, which represents an increase of \$26,613.75 or 23.2% over the 1966 payment of \$114,534.00. The payment to the Association was at the rate of 15c per capita per month for the full twelve months during the financial year, 1967-68.

5. Other Treatment Services

These services include physiotherapy and podiatry. Such services are provided upon the recommendation of the patient's physician and the approval of the Director, Division of Medical Services. Department of Health expenditure during the year amounted to \$712.00 for physiotherapy and \$48.00 for podiatry. This represents a decrease of \$611.00 or 44.6% from the 1966 payment of \$1,371.00. The out-patient physiotherapy received at the various hospitals, is part of the services paid through the Hospitalization Benefits Plan, and consequently, is not included in the above payments.

SCHOOLS FOR NURSING AIDES

These schools, which are established pursuant to The Nursing Aides Act, 1947, are intended to give an opportunity for a career in nursing to women who might not possess the necessary academic qualifications to enrol in a regular School of Nursing.

This program has enjoyed considerable success from its beginning in the first school at Calgary in 1948. In 1958 a second school was opened in Edmonton. The demand for Nursing Aide services has increased with the increase in number and size of the acute and auxiliary hospitals and the decreasing time that the professional nurse has to spend with the patient. Nursing Aides figure prominently in the provision of bedside nursing care.

TABLE 11
TOTAL NURSING AIDE GRADUATES—1958-1967

1958	281	1963	527
1959	451	1964	450
1960	449	1965	536
1961	463	1966	530
1962	541	1967	498

REGISTRY FOR NURSING AIDES

The Nursing Aides Act makes provision for the Minister of Health to appoint a Registrar-Consultant whose duties include the registration of certified nursing aides.

As of December 31, 1967, a total 7,127 nursing aides have been certified, including those persons who were certified under Section 18(b) and Section 19 of the Nursing Aides Regulations. Section 18(b) of the Regulations relates to holders of a certificate of qualification, issued from a recognized school outside of the province, while Section 19 of the Regulations refers to individuals who have certain basic qualifications and who are required to take a supplementary course of study and/or complete examinations in order to obtain registration. During 1967, 109 applicants were registered under Section 18(b) and 15 applicants were registered under Section 19 of the Regulations.

HEALTH CAREERS RECRUITMENT PROGRAM

The prime role of Nursing Recruitment is the dissemination of information on careers in the health field to the people of Alberta, e.g. secondary school students, school counsellors, parents, hospitals, school administrations, youth and business organizations.

In 1967 career talks were given to 5,346 students in schools in Alberta. There were 85,437 brochures on career information distributed to schools, health agencies and business agencies from the Nursing Recruitment Branch. There were 6,280 Career Kits disseminated to school counsellors and school personnel. A total of 44 displays were designed for conferences, conventions and hospital and school events.

Inquiries received in the office were estimated at 5,460 from Alberta, other provinces in Canada and various parts of the world. Three conferences were held for school personnel and school counsellors.

A comprehensive publicity program was implemented in 1967 which provided career information through radio,

television and newspaper media to the people of Alberta, especially to school counsellors, students and parents.

The Nursing Recruitment Branch promotes and programs the special project of Nursing Week for Alberta. This is a public service to make the people of Alberta aware of the needs and opportunities of Careers in Nursing in our present times. Provision is also made for vocational guidance and counselling in the choosing of a career.

A continuous public relations program is maintained with other health agencies in order that all goals may be properly focused on the primary purpose of Nursing Recruitment. During the fiscal year the cost of this program amounted to \$33,720.00.

LABORATORY AND X-RAY SCHOOL

Since 1954, the Provincial Health Department has made available training in the medical laboratory and X-Ray paramedical fields for later employment in the rural hospitals of Alberta.

Since most rural hospitals are unable to employ a technician for each area, graduates from this intensive seven-month course fill the dual role economically. Furthermore, where the work-load in a progressive rural hospital becomes too heavy for one technician, two technicians able to perform dual roles allow adequate emergency call-back coverage in both areas.

Fifteen students graduated in April 1967, bringing the total to 235, with sixteen students under training as of December 1967. Cost of the program amounted to \$47,362.60 during the year.

Associate membership of both the C.S.L.T. and C.S.R.T. is extended to our graduates, signifying recognition of the training program in both disciplines. Credits are arranged towards registration, and 24 have taken R.T. status on this basis.

The need for this "Combined Technician" has remained in excess of supply, and plans for meeting this demand are under consideration.

NORTHERN ALBERTA HEALTH SERVICE

The Northern Alberta Health Service, as inaugurated by Order-in-Council April 1, 1966, continued to improve the preventive and treatment services for the 12,000 persons resident in the 104,000 square miles of Alberta beyond the Health Units. The Medical Officer of Health functioned in an administrative-clinical capacity, the Senior Nurse co-ordinated the preventive and emergency treatment service based on the widely dispersed municipal nursing service, and the Public Health Inspector conducted the surveillance of environmental hygiene.

A dentist became permanently situated at Fort McMurray and arrangements were made with him to provide a monthly visiting service to Fort Chipewyan. Dental Treatment Clinics, with the co-operation of the Volunteer Dental Program, were conducted at Wabasca-Desmarais, High Level and Fort Vermilion.

Ophthalmological Clinics, with an ophthalmologist and ophthalmic dispenser in attendance, examined and provided glasses for 649 residents at Håbay, Assumption,

Meander River, High Level, Rocky Lane, Fort Vermilion, Fox Lake, La Crete, Tompkins Landing, Paddle Prairie, Wabasca, Desmarais and Trout Lake. Fort McMurray residents have a regular optometric service. Other Health Services are supplied by three resident and three visiting physicians, three hospitals, seven municipal nurses in four nursing stations and five Northern Health Service nurses in three Federal nursing stations. Approximately one-third of the population are registered Indians and are receiving adequate services from Federal resources which operate in a pooling arrangement with those of Provincial origin in an endeavor to offer a basic service to all residents. Total cost of program for the year amounted to \$4,218.08.

CEREBRAL PALSY CLINIC – CALGARY

The Calgary Cerebral Palsy Clinic became a branch of the Division of Medical Services in November of 1967 with Doctor Margaret Pearson continuing to act as the Clinical Director. Four teams, consisting of one orthopaedic surgeon and one paediatrician consulted in pairs on the first four Thursdays of every month. The case load continued to increase with forty new cases being registered in 1967. The inability to obtain the services of speech therapists has hindered this program. The cost of operating this Clinic during the fiscal year amounted to \$86,628.37.

TABLE 12
STATISTICS SHOWING ACTIVITIES DURING 1967

Number of examining clinics	—	46
Number of paediatric examinations	—	111
Number of orthopaedic examinations	—	226
Number of new cases	—	40
(a) cerebral palsy	38	—
(b) pending	0	—
(c) miscellaneous	2	—
Number of active cases	—	340

DEPARTMENTS:

1. Physiotherapy

Number of cases benefiting	—	84
Number of cases on home program only	—	34
Number of cases assessed only	—	23
Number of cases recheck only	—	3
Number of treatments	—	4,266
Total Physio assessments	—	42
Total parent instructions	—	193

PROGRESS:

Co-ordination	3	—
Head control	4	—
Sitting balance	10	—
4 point kneeling	4	—
Standing balance	20	—
Reciprocation	9	—
Crawling	7	—
Walking:		
(a) with help (unbraced)	8	—
(b) in walker	4	—
(c) in parallel bars	1	—
(d) with crutches	0	—
(e) with canes	10	—
(f) unaided (braced)	1	—
(g) unaided (unbraced)	11	—
(h) with help (braced)	4	—
(i) balance improved	26	—

GENERAL IMPROVEMENT:

Minor gait improvement	14	—
Considerable gait improvement	15	—
Deformities reduced	24	—
Group muscle control	29	—
Minor activity increased	14	—
No progress	9	—
Wheelchair activities	1	—
Postural improvement	7	—
A.D.L. activities	23	—

BRACING:

(a) for control (first time)	6	—
(b) for control (continued)	22	—
(c) removed	14	—
(d) increased	2	—
(e) special equipment	0	—
(f) splints continued	34	—
(g) splints first time	10	—

BRACES:

Long leg—full control	6	—
Short leg braces—day and night	25	—
Appliances	11	—
Adjustment and repairs	44	—
Corrective shoes	19	—

2. Occupational Therapy

Number of cases benefiting	—	58
Number of assessments	—	57
Number of treatment sessions	—	2,942
Number of parent instructions	—	50
Psychological and emotional problems	7	—
Non-distractibility program	3	—
Activities of daily living	12	—
Perceptual motor training	26	—
Remedial games (for specific muscle strengthening)	17	—
Laterality testing	7	—
Relaxation training	3	—
Writing and pre-writing skills	30	—
Typing	13	—
Communication	8	—

3. Speech Therapy

No speech therapist. Emergent assessments being done through Alberta Children's Hospital—Speech Therapy Department.

4. Social Service

Interviews	—	292
Telephone calls	—	1,808
Home visits	—	26
Observations	—	61
Conferences	—	481
Agency meetings	—	34
Parent meetings	—	5

SURGERY

MOVIE FILMS	35	—
-------------------	----	---

DISPOSITION OF CASES:

Admitted to regular school	7	—
Admitted to special class other than cerebral palsy	2	—
Admitted to School for Retarded	1	—
Admitted to Alberta School Hospital—Red Deer	3	—
Attending Cerebral Palsy Association's Day Care Centre	15	—
Deceased	1	—

FOSTER-HOME PROGRAM

(DOMICILIARY CARE AGREEMENT)

Number of cases serviced	11	—
Number of days domiciliary allowance	1,929	—

Parent Education

Parent meetings attended by Social Worker	5	—
Individual counselling of parents	160	—
Panel presentation by Social Worker and Physiotherapist	1	—
Director spoke at Parent Meeting	1	—

Public Education

Tours of Clinic by visitors	30	—
Instruction to nurses	42	—
Instruction to therapists (students and internes)	17	—
Instruction to teachers	4	—
Instruction to University students (education and psychology)	21	—
Instruction to high school students	6	—

Staff Education

Special Teacher's meetings (attended by teachers)	14	—
Teachers attended Teachers' Convention	2 days	—
Physiotherapist to Canadian Physiotherapy Conference and Course, Ottawa—one week	1	—
Occupational Therapist to National Society Convention, Los Angeles (5 days)	1	—
Supervisor to National Society Convention, Los Angeles (5 days)	1	—
Staff to Glenrose School Hospital—Edmonton	6	—
Field trips (Social Worker)	22	—

Fire Drills

Practice	1	—
Instruction by Fire Department	1	—

Transportation

Provided by Calgary Cerebral Palsy Association Mileage (3 buses) (4 since September, 1967)	72,764 miles	—
--	--------------	---

PROVINCIAL POISON CONTROL SERVICES

During 1967 an additional Treatment Centre was established in the Slave Lake General Hospital, making a total of 115 Poison Treatment Centres in the Province of Alberta. Poison Treatment Services are available to all parts of the province through all the active treatment hospitals.

The two Poison Information Centres — one in the University Hospital, Edmonton, servicing Northern Alberta, and the other in the General Hospital, Calgary, servicing

Southern Alberta, functioned as usual with numerous requests for information on the newer toxic substances and treatment for complicated poisonings.

The Poison Control Advisory Committee consists of thirteen interested consultants functioning under the chairmanship of Dr. J. K. Martin, Professor of Pediatrics, University of Alberta. The Committee in the course of their deliberations considered the available statistics and reviewed the methods of Poison Control.

The film "POISONS" produced locally with local resources had wide spread acceptance and enjoyed extensive circulation through the Branch of Public Health Education.

During 1967 the office of the Poison Control Services received a total of 3556 Individual Poisoning Reports. Monthly reports were made up on a quarterly basis and a short form was mimeographed and mailed to each practising physician and pharmacist, and also to each hospital in the Province.

During 1967 a total of 3556* cases including deaths, were reported. Of these 1753 were males and 1803 were females. The deaths among the reported cases were 63 males and 32 females making a total of 95 deaths, or a fatality rate of approximately 26.7 per 1000 reported poisonings. This rate is slightly higher than it has been previously. In 1967 the Bureau of Vital Statistics reported 93 deaths occurring outside of hospitals.

Total cost of operating this Service amounted to \$15,590.66 for the last fiscal year.

*These are not the official figures for all of the poisonings in the Province. The official figures are published by the Division of Vital Statistics.

Reporting

For the purpose of reporting, eight (8) Categories were established covering the substances in common use. These categories are:

- A. Drugs and Medications for External Use — which embrace antiseptics, liniments, cosmetics, salves, etc.
- B. Drugs and Medications for Internal Use — which cover aspirins, Baby's Own and Ex-Lax, sedatives and sleeping pills, cough syrups, prescription drugs etc.
- C. Household Chemicals — which include cleaners, detergents, lye, polishes, waxes, solvents and varsol, etc.
- D. Industry, Auto & Fuel — such as gas (CO), industrial products, gasoline, etc.
- E. Poisonous Plants & Venomous Animals — which

cover berries and plants, toadstools, etc.

F. Pesticides - which include insecticides, moth balls, rodenticides, weedicides, etc.

G. Tobacco & Alcohol — which cover ethyl alcohol, and tobacco.

H. Miscellaneous — embracing substances difficult to categorize.

Relationship of Age to Poisonings

Age Group below 5 Years

In examining the Tables it becomes apparent that age and poisonings are directly linked. The fact that 2457 of the total reported poisonings occurred in the Age Group 0 to 4 (actually 69.0 per cent), is ample evidence that this age group needs almost constant supervision. While this information, in relation to poisonings, extends and amplifies this need, it has long been recognized by parents, physicians, nurses and other persons concerned with the care of children that this age group, through its adventurous proclivities in seeking, climbing, tasting and exploring, was accident-prone. It is interesting to note that of the poisonings, 1372 including deaths occurred in males and 1085 in females. There were 2 male deaths and 1 female, with the rate being 3.2 per cent of the total deaths.

Age Group 5-14

In this age group there were 170 poisonings with 90 males and 80 females including deaths. This age group accounted for only 4.1 percent of the total poisonings. It is interesting to note that while the males in the 0 to 4 age group accounted for 1372 of the total poisonings in the age group, the males in the 5-14 age group accounted for 90 of the total poisonings. There was 1 male death and 3 females in this group accounting for 4.0 percent of the total deaths.

Age Group 15-24

In this age group there were 402 poisonings with 100 males and 302 being females, including deaths, with the females accounting for the largest percentage of the poisonings. The poisonings in the age group accounted for 11.3 percent of the total poisonings. There were 13 male deaths and 4 females, making a rate of 17.9 percent of the total deaths.

There has been a suggestion made that poisonings in the age group 15-24 may not be accidental in its true sense, however, our experience shows that most of the incidents are accidental, generally being due to carelessness in not reading directions or understanding what the particular substance was designed to do.

Age Group 25-44

This age group accounted for 369 or 10.4 percent of the total poisonings. The females were again in the lead with 256 of the total poisonings, including deaths, for this age group. There were 113 males poisoned. In examining the data, it is easily seen that a large proportion of the 256 cases were associated with Drugs and Medications for Internal Use. On the face of it this indicates that there may have been some abuse in the use of such drugs and medications. It should be sufficient to indicate that the great profusion of Drugs and Medications for Internal Use, available not only in drug stores, but also in other retail outlets, and the carelessness with which such materials are handled in the home, could easily account for a large proportion of the poisonings being definitely accidental. The mere fact that most of the victims were females, only supports the well-known fact that the females, mostly

mothers, are more commonly in the home and are subjected to stresses and strains which the male escapes. The 22 male and 13 female deaths accounted for 36.1 percent of the total deaths.

Age Group 45-Up

The poisonings in this age group are 158 or 4.4 percent of the total poisonings reported. Of these 78 involved males and 80 females, including deaths. Here again Drugs and Medications for Internal Use were in the lead, with the other cases being approximately evenly distributed amongst the other categories. Information gathered in relation to a number of these cases shows that many of them involved elderly persons, and it is entirely reasonable to assume that the confusion associated with illness and/or age caused either a mistake in identity of medications or an overdose of the particular product involved. The 25 males and 11 female deaths were 37.1 percent of the total deaths.

TABLE 13
DEATHS FROM POISONINGS REPORTED BY THE BUREAU OF VITAL STATISTICS
AND HOSPITALS
LISTED BY AGE-GROUPS, SEX, SUBSTANCE AND CATEGORIES—FOR 1967

CATEGORIES	0-4		5-14		15-24		25-44		45-Up		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
B. Drugs and Medicine for Internal Use												
Aspirin	0	0	0	0	0	0	1	0	0	0	0	1
Barbiturates	0	0	0	0	1	0	4	5	2	1	7	6
Prescriptions	0	0	0	0	1	0	0	0	0	0	1	0
Sedatives	0	0	0	0	0	0	2	0	0	0	0	2
Tonic and Vitamins	0	0	0	0	0	0	0	0	0	1	0	1
C. Household Chemicals												
Bleach and Javex	0	0	0	0	0	0	0	0	1	0	1	0
D. Industry, Auto and Fuel												
Carbon Monoxide	1	1	1	3	10	3	16	4	20	5	48	16
F. Pesticides												
Rodenticide	0	0	0	0	1	0	0	1	0	1	1	2
G. Tobacco and Alcohol												
Ethyl	0	0	0	0	0	1	2	0	2	0	4	1
H. Miscellaneous												
Undetermined	1	0	0	0	0	0	0	0	0	3	1	3
Totals	2	1	1	3	13	4	22	13	25	11	63	32

TABLE 14
POISONINGS (INCLUDING DEATHS), IN EACH AGE-GROUP,
BY SEX & TOTALS FOR ALL CATEGORIES BY MONTHS - 1967

Months	0 - 4			5 - 14			15 - 24			25 - 44			45 - Up			All Age Groups			Deaths		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Jan.	128	100	228	9	2	11	13	30	43	14	22	36	10	6	16	174	160	334	10	5	15
Feb.	94	79	173	4	4	8	11	27	38	12	23	35	10	7	17	131	140	271	10	3	13
Mar.	126	104	230	2	8	10	12	19	31	10	21	31	2	2	4	152	154	306	2	1	3
Apr.	123	100	223	17	13	30	9	24	33	5	25	30	6	12	18	160	174	334	7	6	13
May	115	100	215	13	8	21	6	16	22	9	22	31	10	6	16	153	152	305	4	-	4
June	100	79	179	4	10	14	5	17	22	5	12	17	3	2	5	117	120	237	-	-	-
July	99	97	196	8	18	16	5	20	25	8	17	25	9	7	16	129	149	278	4	6	10
Aug.	121	84	205	11	4	15	4	28	32	8	20	28	7	4	11	151	140	291	3	2	5
Sept.	127	95	222	4	6	10	3	27	30	13	23	36	5	3	8	152	154	306	8	-	8
Oct.	113	95	208	8	6	14	7	33	40	9	20	29	2	13	15	139	167	306	-	2	2
Nov.	117	82	199	4	7	11	9	31	40	10	22	32	7	7	14	147	149	296	6	5	11
Dec.	109	70	179	6	4	10	16	30	46	10	29	39	7	11	18	148	144	292	9	2	11
Totals	1,372	1,085	2,457	90	80	170	100	302	402	113	256	369	78	80	158	1,753	1,803	3,556	63	32	95

TABLE 15
POISONINGS (INCLUDING DEATHS), BY SEX AND TOTALS FOR ALL AGE-GROUPS
FOR EACH CATEGORY BY MONTHS - 1967

Months	Cat. A		Cat. B		Cat. C		Cat. D		Cat. E		Cat. F		Cat. G		Cat. H		Totals		Deaths	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Jan.	10	5	15	112	125	237	30	15	45	9	24	-	-	-	1	1	174	160	334	10
Feb.	5	6	11	89	108	197	12	15	27	18	3	21	-	-	5	8	131	140	271	10
Mar.	19	7	26	95	115	210	24	15	39	7	6	13	-	-	4	4	152	154	306	2
Apr.	10	9	19	93	126	219	33	18	51	15	12	27	-	-	1	3	160	174	334	7
May	10	9	19	88	106	194	22	20	42	13	3	16	4	2	6	1	153	152	305	4
June	3	8	11	69	80	149	23	14	37	7	7	14	-	-	1	2	117	120	237	-
July	4	8	12	65	98	163	26	16	42	16	8	24	4	1	9	16	129	149	278	4
Aug.	12	5	17	80	100	180	29	18	47	8	3	11	6	4	10	3	151	140	291	3
Sept.	9	12	21	80	117	197	36	11	47	14	3	17	1	1	5	8	152	154	306	8
Oct.	6	6	12	87	130	217	29	19	48	6	4	10	1	-	2	5	139	167	306	-
Nov.	9	9	18	99	113	212	19	9	28	12	8	20	-	-	4	6	147	149	296	6
Dec.	11	8	19	91	115	206	24	8	32	13	1	14	-	-	2	4	148	144	292	9
Totals	108	92	200	1,048	1,333	2,381	307	178	485	144	67	211	16	10	26	40	1,753	1,803	3,556	63

ALBERTA HEALTH PROGRAM

The Alberta Medical Plan which began operation on October 1st, 1963 through the co-operative planning of the Government of the Province of Alberta, the College of Physicians & Surgeons of Alberta, representatives of Medical Services (Alberta) Incorporated and of the Canadian Health Insurance Association became, on July 1st, 1966, the Alberta Health Program. In addition to medical services, this program included the Extended Health Benefits Plan. The administration was continued by the Division of Medical Services.

The Alberta Health Program provided a pre-payment medical plan covering the costs of medical, surgical and obstetrical services, together with an extended health benefits plan for all residents of Alberta, regardless of age, health or occupation. The Government of Alberta provided financial contributions toward premium payments for those in defined income levels. Maximum premiums were fixed,

below these maximums, premium levels might vary with the insurance company chosen. Residents enrolled directly with the insurer of their choice, and persons eligible for subsidy were required to also complete an application for subsidy.

The following subsidy levels were available:

- A. 80% of the premium cost for Alberta Residents with income below the taxable level according to Federal Government tax regulations.
- B. 50% of the premium cost for Alberta residents with taxable income not exceeding \$500.00 per annum according to Federal Government tax regulations.
- C. 25% of the premium cost for Alberta residents with taxable income not exceeding \$1,000.00 per annum according to Federal Government tax regulations.

For the period January 1st to December 31st, 1967 a total of \$3,208,766.03 was spent in subsidizing the cost of health insurance for the subsidized categories.

The Alberta Health Plan commenced on July 1st, 1967.

DIVISION OF EPIDEMIOLOGY

E. S. O. Smith, M.A., M.B., B.Chir., D.P.H., D.I.H., C.R.C.P.(C), Director

Epidemiology has been defined as the study of the distribution and determinants of disease prevalence in man. The methods of epidemiology were originally developed to determine the factors associated with the propagation of the numerous communicable diseases which, until relatively recent times, were major causes of morbidity and mortality. Some of the factors were preventable, and the identification of these factors paved the way for effective control measures.

The application of similar techniques to the study of non-communicable diseases is a fairly new field, but one which has already made great strides in the twenty years or so of its existence. It is the function of the epidemiologist to study variations not only in the incidence and prevalence of a disease, but also in the background, habits and environment of the populations affected, with the object of identifying such relationships as may exist.

Against this background, the Division of Epidemiology was established in September 1967 to assist other divisions of the Department in the collection, processing and tabulation of data, the design and conduct of epidemiological studies and the statistical evaluation of the

results of such studies. Between then and the end of the year assistance was given to

- (1) The Division of Mental Health in the establishment of a procedure for the collection and coding of statistical data on psychiatric admissions and separations;
- (2) The Division of Social Hygiene in the design of a system for coding statistical data on new cases of venereal disease;
- (3) The Division of Industrial Health Services in the design of a system for the coding and analysis of data collected during a survey of grain elevator workers.

Although the epidemiological approach is applicable to the whole spectrum of human disease, it will clearly be the duty of an epidemiological team within government to devote its attention to those conditions which are of public health importance, and to concern itself primarily with the major causes of morbidity and mortality. While research in the form of analytical epidemiology and experimental epidemiology will be the team's objective, its efforts during the first year or two will inevitably be concentrated in the area of descriptive epidemiology.

DIVISION OF CANCER SERVICES

J. R. Ibberson, M.D., Executive Director

The three Cancer Clinics in the Province of Alberta have experienced a very busy year (1967) as the tables below will reveal:

1. Number of examinations made (Malignant and Benign)

January 1-December 31, 1967 is 33,793.

	New		Review		Total	
	1967	1966	1967	1966	1967	1966
Edmonton	3,548	3,457	14,102	13,891	17,650	17,348
Calgary	1,984	1,939	11,946	12,541	13,930	14,480
Lethbridge	499	555	1,714	1,769	2,213	2,324

It will be noted that the total number of examinations made in the Edmonton, Calgary and Lethbridge Clinics is 33,793 as compared with 34,152 in 1966; 32,810 in 1965; 30,944 in 1964 and 29,439 in 1963.

Review examinations carried out at the Peripheral Clinics during 1967 total 1,941 as shown below:

Grande Prairie	441
Peace River	352
Medicine Hat	1,148

2. Number of examinations made where malignancy is proven 30,221 as compared with 30,182 in 1966 as shown in the following table:

	Edmonton	Calgary	Lethbridge	Total
1967	15,243	13,018	1,960	30,221
1966	14,828	13,333	2,021	30,182

3. NEW MALIGNANT CASES

	Edmonton	Calgary	Leth- bridge
New Malignant cases reporting to Clinic—1967	1,789	1,249	243
Previously benign cases reporting to Clinic—1967	182	65	25
Total New Malignant cases reporting to Clinic—1967	1,971	1,314	268
Non-reporting Malignant cases by:			
Pathological report	389	190	7
Autopsy report	45	18	11
Reported by Vital Statistics	150	158	19
	584	366	37
Total	2,555	1,680	305

	Edmonton	Calgary	Leth- bridge
Prior to 1953 Malignant cases reporting to Clinic for the first time in 1967	2	2	0
Cases treated elsewhere reporting to Clinic in 1967	83	60	14
Cases who developed a second malignancy in 1967	68	56	27
The total number of New Malignant cases discovered in Alberta in 1967 was 4,560.			

4. Number of examinations made on patients which proved benign:

	Edmonton	Calgary	Lethbridge	Total
1967	2,407	912	253	3,572
1966	2,520	1,147	303	3,970

5. (a) DIAGNOSTIC RADIOLOGY

	No. of Films		No. of Pts.		No. of Exams.		Average No. of Exams per day	
	1967	1966	1967	1966	1967	1966	1967	1966
Edmonton	55,399	53,175	11,718	11,217	18,082	17,261	72.6	69.0
Calgary	8,793	8,973	2,573	2,608	3,556	3,437	14.3	13.7

	Peripheral Clinic Films Read		Outside Films Reviewed	
	1967	1966	1967	1966
Edmonton	2,774	1,234	25,734	19,019
Calgary	0	30	1,526	1,039

EDMONTON CLINIC

	G.I. Series	Large Bowel and Air Contrast	Barium Fluoroscopies (G.I. Series, Large Bowel and Air Contrast)	Urinary Tract	Tomograms
1967	623	745	1,368	322	694
1966	712	887	1,599	380	745

5. (b) THERAPEUTIC RADIOLOGY

	Edmonton			Calgary		
	New	Retreat	Total	New	Retreat	Total
Pts. treated by X-ray, Co. 60 or Cesium 137	1967—698 1966—683	332 266	1,030 949	508 531	227 144	735 675
Pts. treated by X-ray, Co. 60 or Ces. 137 and radium	1967—44 1966—43	— —	44 43	43 54	— —	43 54
Pts. treated by radium alone	1967—17 1966—22	— —	17 22	15 —	— —	15 —
Benign pts. treated by radiation	1967—53	—	53	—	—	—
Total patients treated at Clinics	1967—812 1966—748	332 266	1,144 1,014	566 585	227 144	793 729
Treatments given by	Edmonton			Calgary		
	1967	1966		1967	1966	
Cobalt 60	11,521	11,530		5,449	4,868	
Cobalt 60 Rotation				1,792	2,089	
Deep X-ray	617	547				
Superficial X-ray	414	460		1,410	1,436	
Cesium 137	2,425	1,259		1,372	1,224	
Treatment on two machines	453	504				
Single treatments	42	24				
Radiation treatments to benign patients	346					
	15,818	14,324		10,023	9,617	
Radium insertions, implants	113	113		78	74	
Laboratory examinations in Clinic laboratories (Units of laboratory work)	59,633	57,789		24,922	19,873	

6. NUMBER OF CASES SUPPLIED WITH THE FOLLOWING SERVICES:

	Radiation Therapy		Prosthetic Appliances	
	1967	1966	1967	1966
Edmonton	1,144	1,014	5	
Calgary	793	729	0	
Lethbridge	23	13	1	
	1,960	1,756	6	

	Diagnostic X-rays		Major Surgery		Exploratory Laparotomy	
	1967	1966	1967	1966	1967	1966
Edmonton	11,728	11,226	1,603	1,317	149	133
Calgary	2,585	2,610	840	763	72	83
Lethbridge	2		127	179	11	30
	14,315	13,836	2,570	2,259	232	246

	Breast Biopsies		Other Biopsies		Diagnostic Curettages	
	1967	1966	1967	1966	1967	1966
Edmonton	628	490	771	716	256	290
Calgary	262	292	588	620	175	218
Lethbridge	95	123	150	180	42	40
	985	905	1,509	1,516	473	548

	Encephalograms, etc.		Bronchoscopy and Esophagoscopy		Sigmoidoscopy	
	1967	1966	1967	1966	1967	1966
Edmonton	2	253	227		320	368
Calgary	2	85	70		26	22
Lethbridge	1	5	11		7	8
	5	343	308		353	398

	Cystoscopy		Investigations and Consultations		Laboratory Tests*	
	1967	1966	1967	1966	1967	1966
Edmonton	519	436	1,104	729	59,633	57,966
Calgary	159	167	250	239	26,429	21,230
Lethbridge	36	39	13	108		45
	714	642	1,367	1,076	86,062	79,241

7. Since the opening of the Clinics in 1941 the total number of examinations made is 415,629.

*Units of Laboratory work (Dominion Bureau of Statistics)

DIVISION OF SOCIAL HYGIENE

P. L. Rentiers, M.D., Director

There were no changes in the administration and policies of the Division of Social Hygiene during 1967. Based on new admissions and patient visits the Edmonton and Calgary clinics were increasingly busy. However, the rates for reported syphilis and gonorrhoea remained much the same. As indicated in the attached statistical tables there were 207 cases of syphilis reported, 176 of which were early infections (85%) compared to 207 cases with 180 early infections (87%) during 1966. It is felt that the enhanced epidemiological procedures initiated in 1966 to combat the rising incidence of syphilis have been reasonably successful in preventing a continuation of this trend.

The importance of routine blood testing, especially for high risk groups such as gaol inmates, is again demonstrated when it is realized that over one-third of the reported syphilis was first detected by this procedure. It is of particular interest to note that 4.3% of the total syphilis cases were immigrants. It would appear that some lapses must occur in the taking and reporting of serological tests on individuals entering Canada.

Three cases of congenital syphilis were reported during the year, only one of which was a newborn. The mother, in this instance, had a negative prenatal serology but at confinement was found to have a positive cord blood, a fact which once more emphasizes the very great importance of not eliminating any of the occasions when routine blood testing is recommended.

Gonorrhoea showed a slightly increased rate for 1967, a trend which is expected to prevail due to the inherent difficulties of controlling this infection mentioned

in previous reports. As predicted, the statistics reveal improved reporting of gonorrhoea by private physicians since the coming into force of the new Venereal Diseases Prevention Act in 1965.

The highest incidence of venereal infections is still found in the young adult group, not in the teenagers, as reported by some authorities in other areas. It is important to stress that, if these infections are to be kept at a minimum in the latter group, there will need to be a concentrated effort on the part of all parents, educators and health workers to provide the necessary information to young people early enough to allow them to make choices in regard to their behaviour which will be in the best interests of both themselves and society. It is gratifying that this Division and the Branch of Public Health Education are receiving many more requests for assistance in this regard.

The Indian and Metis people of the province continue to present the greatest single problem for the Division in spite of the extra epidemiological and educational endeavors directed toward them. In 1967 this small ethnic group accounted for 38.6% of the reported syphilis and 30.6% of the total confirmed and unconfirmed gonorrhoea. It is hoped that the present stress being put upon improving the socio-economic conditions of the native Canadian will in due course be reflected in a lowered incidence of venereal disease for them.

The interest and co-operation of the practising physicians, the various health and welfare agencies, and all other individuals who have contributed to the work of this Division is gratefully acknowledged.

DEPARTMENT OF HEALTH

DIVISION OF SOCIAL HYGIENE
ALLEGED SOURCES OF OR CONTACTS TO VENERAL INFECTION
JANUARY 1 TO DECEMBER 31, 1967

	Reported Contacts with Sufficient Information for Investigation			Reported Cases of Veneral Infection with Insufficient or no Information Concerning Contacts
	Number Reported	Number Located	Number No Action Taken	
TOTALS	4,289	4,054	20	1,993
Residential Status				
Alberta	4,004	3,875	17	
Non-Alberta	257	154	2	
Northwest Territories	28	25	1	
Agents Forwarding Information				
Private Physicians	1,520	1,460	11	961
Armed Forces	22	19	1	12
Provincial Clinic	2,512	2,402	8	1,020
Other Provinces	235	173	0	0

EPIDEMIOLOGICAL INVESTIGATIONS CARRIED OUT BY DIVISION OF SOCIAL HYGIENE

Unit	I. Reported Contacts to Veneral Disease					
	Processed	Investigated	No Action Taken	Not Investigated Insufficient Information	II. Delinquents	III. Miscellaneous
Edmonton Clinic	2,773	2,069	0	704	267	833
Calgary Clinic	1,939	1,740	0	199	64	237
Lethbridge Clinic	163	154	0	9	1	107
Mobile Clinic	754	646	0	108	7	82
Head Office	6,302	4,289	20	1,993		

PROVINCIAL CLINIC, Alberta Jasper Building, 9815 Jasper Avenue, Edmonton, Alberta

Total Number of New Cases of Veneral Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age not stated		TOTALS
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (all forms)					2		110	72	1,016	224			1,424
Syphilis (acquired-primary)							1	1	39	1			42
Syphilis (acquired-secondary)							1	2	13	25			41
Syphilis (acquired-latent)									6	2			8
TOTALS					2		112	75	1,074	252			1,515

Number of Cases of Syphilis	Male	60	Female	31	91
Number of Cases of Gonorrhoea	Male	1,128	Female	296	1,424

Number and Results of Serological Tests for Syphilis	12,012 of which	532 were Reactive
Number and Results of Darkfield Examinations	175 of which	26 were Positive
Number and Results of Cerebrospinal Fluid Tests	0 of which	0 were Positive
Number and Results of Bacteriological Tests for Gonococci	1,931 of which	1,181 were Positive
Number and Results of Cultures taken for Gonococci	2,131 of which	622 were Positive
Total Number of Patient Visits	21,065	
Total Number of New Admissions	1,740	
Total Number of Old Infections for Follow-up First Time		
in Current Year - Syphilis	187	
- Gonorrhoea	932	

PROVINCIAL CLINIC, 118 11th Avenue S.E., Calgary, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not stated		TOTALS	
	M	F	M	F	M	F	M	F	M	F	M	F		
Gonorrhoea (all forms)							46	17	524	23			610	
Syphilis (congenital)										1			1	
Syphilis (acquired-primary)									8				8	
Syphilis (acquired-secondary)									3	9			12	
Syphilis (acquired-latent)									2	2			4	
TOTALS							46	17	537	35			635	
Number of Cases of Syphilis	Male		13		Female		12						25	
Number of Cases of Gonorrhoea	Male		570		Female		40						610	
Number and Results of Serological Tests for Syphilis							10,924	of which	311	were Reactive				
Number and Results of Darkfield Examinations							75	of which	9	were Positive				
Number and Results of Cerebrospinal Fluid Tests							1	of which	0	were Positive				
Number and Results of Bacteriological Tests for Gonococci							3,235	of which	593	were Positive				
Number and Results of Cultures taken for Gonococci							1,607	of which	38	were Positive				
Total Number of Patient Visits							16,290							
Total Number of New Admissions							1,430							
Total Number of Old Infections for Follow-up First Time														
in Current Year	-	Syphilis	75	-	Gonorrhoea	122								

PROVINCIAL CLINIC - c/o Lethbridge Municipal Hospital, Lethbridge, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		TOTALS	
	M	F	M	F	M	F	M	F	M	F		
Gonorrhoea (all forms)							2	3	30	3	38	
Syphilis (acquired-primary)									2		2	
Syphilis (acquired-secondary)										1	1	
TOTALS							2	3	32	4	41	
Number of Cases of Syphilis			Male		2		Female		1		3	
Number of Cases of Gonorrhoea			Male		32		Female		6		38	
Number and Results of Serological Tests for Syphilis							493		of which		21	were Reactive
Number and Results of Darkfield Examinations							5		of which		4	were Positive
Number and Results of Bacteriological Tests for Gonococci							129		of which		36	were Positive
Number and Results of Cultures taken for Gonococci							11		of which		0	were Positive
Total Number of Patient Visits							497					
Total Number of New Admissions							85					
Total Number of Old Infections for Follow-up First Time												
in Current Year	-	Syphilis	2	-	Gonorrhoea	2						

MOBILE CLINIC, Lac La Biche, McMurray, Fort McKay, Fort Vermilion, Fox Lake, Slave Lake Area, Whitecourt, Valleyview, Peace River and Grande Prairie Areas, Red Deer, Stettler, Camrose, Drayton Valley and Edson Areas.

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not stated		TOTALS
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (all forms)								4		2			6
Syphilis (acquired-primary)							1						1
Syphilis (acquired-secondary)							1	2	2	4			9
Syphilis (acquired-latent)										1			1
Type Undetermined									1				1
TOTALS							2	6	3	7			18
Number of Cases of Syphilis	Male				5		Female		7				12
Number of Cases of Gonorrhoea	Male				0		Female		6				6
Number and Results of Serological Tests for Syphilis							1,936 of which					95 were Reactive	
Total Number of Treatments Given							3						

DEPARTMENT OF HEALTH

PROVINCIAL GAOL, Fort Saskatchewan, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 Yrs. & over		Age Not stated		TOTALS	
	M	F	M	F	M	F	M	F	M	F	M	F		
Gonorrhoea (all forms)							8	16	36	86			146	
Syphilis (acquired-primary)									1				1	
Syphilis (acquired-secondary)							1		2	1			4	
TOTALS							9	16	39	87			151	
Number of Cases of Syphilis	Male						4		Female		1		5	
Number of Cases of Gonorrhoea	Male						44		Female		102		146	
Number and Results of Serological Tests for Syphilis							5,185 of which						232 were Reactive	
Number and Results of Bacteriological Tests for Gonococci							74 of which						46 were Positive	
Number and Results of Cultures taken for Gonococci							2,395 of which						280 were Positive	

PROVINCIAL GAOL, Lethbridge, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not Stated		TOTALS
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (all forms)							1		15				16
TOTALS							1		15				16
Number of Cases of Syphilis	Male				0								0
Number of Cases of Gonorrhoea	Male				16								16
Number of Prisoners Admitted	3,608												
Number of Results of Serological Tests for Syphilis	585 of which 10 were Reactive												

SPY HILL GAOL, Calgary, Alberta

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not Stated		TOTALS	
	M	F	M	F	M	F	M	F	M	F	M	F		
Gonorrhoea (all forms)									4		1		5	
Syphilis (acquired-secondary)									1				1	
TOTALS									5		1		6	
Number of Cases of Syphilis			Male		1								1	
Number of Cases of Gonorrhoea			Male		5								5	
Number of Prisoners Admitted							6,174							
Number and Results of Serological Tests for Syphilis							3,704 of which		24 were Reactive					

PRIVATE PHYSICIANS REPORTING CASES

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not Stated		TOTALS	
	M	F	M	F	M	F	M	F	M	F	M	F		
Gonorrhoea (all forms)	1			1	6	2	84	83	772	255	34	18	1,255	
Syphilis (congenital)									1					2
Syphilis (acquired-primary)									1	17	4			22
Syphilis (acquired-secondary)									3	15	13		1	32
Syphilis (acquired-latent)									1	6	3			10
Acquired-Tertiary (Cardiovascular)											1			1
Acquired-Tertiary (Neurosyphilis)											1			1
Type Undetermined										2		2		
TOTALS	1			1	6	2	84	88	813	277	34	19	1,325	
Number of Cases of Syphilis				Male	42			Female			28		70	
Number of Cases of Gonorrhoea				Male	896			Female			359		1,255	
Number of Doctors in the Province receiving Consultative Service									73					

NEW CASES OF SYPHILIS AND GONORRHOEA REPORTED IN ALBERTA - 1967

Total Number of New Cases of Venereal Disease Classified as to Sex and Age of Patient:

	Under 1 yr.		1 - 4 yrs.		5 - 14 yrs.		15 - 19 yrs.		20 yrs. & over		Age Not Stated		TOTALS
	M	F	M	F	M	F	M	F	M	F	M	F	
Gonorrhoea (all forms)	1			1	8	2	255	195	2,416	593	39	18	3,527
Syphilis (congenital)									1	1			3
Syphilis (acquired-primary)							2	2	67	5			76
Syphilis (acquired-secondary)							3	7	36	53		1	100
Syphilis (acquired-latent)								1	14	8			23
Syphilis-Tertiary (cardiovascular)									1				1
Syphilis-Tertiary (neurosyphilis)									1				1
Type Undetermined									1	2			3
TOTALS	1			1	8	2	260	205	2,537	662	39	18	3,734
Number of Cases of Syphilis	Male				127		Female		80				207
Number of Cases of Gonorrhoea	Male				2,718		Female		809				3,527

Total Number of Cases Reported by Various Clinics of the Division of Social Hygiene

SEX	SYPHILIS	GONORRHOEA	TOTALS
Male	85	1,795	1,880
Female	52	450	502
TOTALS	137	2,245	2,382

Cases Reported by Doctors and Military Authorities

	PRIVATE PHYSICIANS	ARMED FORCES	TOTALS
Syphilis	69	1	70
Gonorrhoea	1,255	27	1,282
TOTALS	1,324	28	1,352

REPORT OF THE PROVINCIAL LABORATORIES

J. M. S. Dixon, M.D., M.C.Path., Dip.Bact., Director

The Provincial Laboratories of Public Health at Edmonton and Calgary performed 1,510,746 examinations during 1967. This number is about 10% greater than that recorded in 1966 and reflects the continuing and apparently endless increase in the demand for diagnostic medical laboratory work. At the Calgary laboratory the increase in the number of examinations was 13% despite most difficult conditions; the laboratory is overcrowded, and Dr. Shute points out that lack of space not only prevents further desirable expansion and any increase in the size of the staff but also restricts the type of examinations that can be performed. The proposed new laboratory in Calgary is urgently required. The recently expanded facilities in the Edmonton laboratory are being used fully, and the development of new and more efficient techniques has ensured that the Provincial Laboratory maintains its high reputation throughout Canada.

NEW DEVELOPMENTS

Towards the end of 1967, a machine was purchased that will automate certain serological procedures. It will enable a complement fixation test with a Reiter protein antigen to be used routinely in the serological diagnosis of syphilis. The method, which is a major technological advance, will enable more rapid and more accurate examinations to be made without increasing the number of technicians, and is believed to be the first application of such an automated serological technique in Canada west of Ontario. It is hoped that a second machine will be obtained in the near future for the detection of antibodies to viruses in large numbers of blood samples. Automated methods have been in use in other branches of laboratory medicine, notably clinical chemistry, for some years, but technical problems have delayed their application to serological procedures until very recently. There is no doubt that when such methods come into general use in microbiological laboratories it will be possible to make epidemiological surveys of the incidence of various infectious illnesses that are quite impossible by the manual techniques in current use. The implications in public health work are likely to be highly significant and important.

An additional epidemiological tool that was incorporated into the laboratory routine during the year is the typing of strains of *Pseudomonas aeruginosa* by a pyocine-typing method. Pyocines are specific antibacterial substances that are produced during growth by some strains of *Pseudomonas aeruginosa* and not by others. They are detected and identified by their inhibitory activity against certain sensitive 'indicator' bacteria that are used in the typing method. The technique enables strains to be characterised so that those from a common source can be identified; the application of the technique is similar to that of bacteriophage-typing of *Staphylococcus aureus*, a tech-

nique that has been in use at the Edmonton laboratory for some years. *Pseudomonas* infections are now becoming as much of a problem in causing serious, and not uncommonly fatal, infections in hospital as were staphylococci a few years ago, and the newly introduced pyocine typing method will be of considerable assistance to hospital personnel in identifying incidents of cross-infection and in tracing the source of infections so that they may be eliminated. The Edmonton laboratory is the centre from which the indicator strains used in this technique are distributed to laboratories throughout Canada.

One of the problems that continually confront any laboratory serving a large area of country is to ensure that specimens do not deteriorate, or change in any way that would affect the result of examination, during transportation to the laboratory. Some aspects of this problem relating to swabs were solved by my predecessor, Dr. Stuart, who devised a transport medium that is now in use in its original or a modified form throughout the world. Recently we have been concerned with another aspect — that of urine specimens. Contamination with small numbers of bacteria commonly occurs during collection of specimens of urine. If the specimen can be cultured within an hour or two of collection the contamination is of little or no consequence, but if the urine does not reach a laboratory for two or three days, as is unfortunately sometimes the case with specimens that reach Edmonton from isolated communities, multiplication of contaminating organisms occurs during transit. It may then be impossible to decide in the laboratory whether the patient was suffering from a urinary tract infection or whether the high bacterial count merely consists of contaminating organisms that have increased in number during transit. In order to overcome this difficulty, we have introduced into trial usage an agar-filled plastic spoon which is in effect a miniature culture medium that the patient can inoculate by holding it in the stream of urine. The spoon is submitted to the laboratory where it is easy to distinguish between the scanty growth that indicates bacterial contamination of a specimen and the heavy growth indicative of a bacterial infection of the urinary tract. Our preliminary findings with the agar-filled spoons have been very encouraging and we propose to bring them into routine use shortly.

As the incidence of tuberculosis falls in Canada, infections by mycobacteria other than tubercle bacilli are becoming of increasing importance. Much work has been done in recent years in classifying and determining the significance of these so-called anonymous mycobacteria, and methods for the detection and identification of these organisms have now been introduced into the Provincial Laboratory. Atypical strains from other laboratories in the Province are received for study and classification.

Medical virology continues to advance rapidly and the new developments have been reflected in the initiation of

new and useful diagnostic techniques in the Edmonton laboratory. A wider range of diagnostic tests is now offered, including a serological test for the diagnosis of rubella, and both cultural and serological examinations for the diagnosis of infection with *Mycoplasma pneumoniae*. *M. pneumoniae* is among the commonest causes of respiratory infection in children and young adults, often giving rise to pneumonia. The organism is sensitive to certain antibiotics and thus the detection of its presence by laboratory tests is of considerable value to the practising physician. The significance of the test for rubella is that the occurrence of this infection in a woman in the early months of pregnancy, when congenital abnormalities may be caused by the virus, can now be established with certainty. Other virus infections that are not liable to cause fetal disease may be clinically indistinguishable from rubella, but the distinction can now be made in the laboratory.

An interesting development in the Department of Pathology has been the use of electron microscopy for the examination of tissue biopsies. This work, which is undertaken by Dr. T. K. Shnitka, is concerned mainly with the investigation of renal disease. It is time-consuming and exacting, and only a limited number of specimens can be accepted for this technique at present, but it holds promise for the future. An important aspect of the cytopathology division during 1967 was the increase in the number of specimens examined from sites other than the uterine cervix; these specimens, which include sputum, bronchial washings and gastric washings, require special care and are much more demanding than the cervical smears, but this work represents a valuable extension by Dr. Kasper of the cancer-detection service which the laboratory now provides.

REGULAR SERVICES

Pathology

Dr. Macgregor reports that 15,032 tissue specimens were examined in 1967, an increase of about a thousand over the previous year's figure. The division of cytopathology also continued to expand. The rate of increase in cytopathological examinations was less than in previous years, but nevertheless the total of 57,248 gynecological tests is more than 3,000 greater than in 1966. Dr. Kasper points out that from 1961 to the end of 1967, over 225,000 cytological examinations have been performed in this laboratory and 1,238 cases of carcinoma of the female genital tract detected. The value of this work in the saving of human lives and prevention of suffering is obvious. During 1967, the formal training period of the cytopathology technicians training school was extended to one year. Eight new junior students joined the class in July. The rental of a closed circuit television system suitable for microscopical use will shortly make possible the instruction of larger groups of students than hitherto. This and other proposed teaching aids should maintain the high quality of instruction while taking less of the time of the professional and senior technical staff. The training programme in pathology for medical graduates in the University Department of Pathology is also developing to Dr. Macgregor's satisfaction and the surgically removed tissues processed in the Provincial Laboratory play an important part in this programme.

Bacteriology

The isolation of 381 virulent strains of *Corynebacterium diphtheriae* was the most notable feature of the work done at the Edmonton laboratory in 1967. This is in striking contrast to the three isolations of diphtheria bacilli recorded in 1966. They were mostly isolated from specimens taken in the last quarter of the year from a wide variety of locations in northern and central Alberta. Fortunately most of the strains were from symptomless carriers, generally fully immunized Indian or Metis school-children, but a few cases of clinical illness were reported. The examination of throat and nose swabs from contacts of these cases and carriers during November and December imposed a tremendous load on the routine diagnostic section, the size of which is indicated by the fact that 31,543 such swabs were examined in 1967, an increase of more than 11,000 over the 1966 figure. The diphtheria bacilli isolated are still under investigation in the laboratory in order to determine whether they possess some unusual character that enabled them to spread widely in the Province while causing very little clinical illness.

In the tuberculosis section, minor structural alterations and the provision of ventilated safety hoods have improved the working conditions. The introduction of more sensitive cultural techniques has enabled us to reduce greatly the number of specimens that require inoculation into animals.

The enterobacteria section report a welcome reduction in the number of isolations of dysentery organisms in 1967 to 340, compared with 605 in 1966. *Shigella flexneri* returned to its position as the predominant species, from which it was displaced by *Sh. sonnei* in 1966. The fall in isolations has largely been the result of a decreasing incidence of the latter organism from 284 isolations in 1966 to 92 in 1967. Among the 608 salmonellae strains isolated, 25 different serotypes were identified. The three most commonly found types were *Salm. newport*, *Salm. typhimurium* and *Salm. heidelberg*. The number of isolations of *Salm. infantis* fell from 115 in 1966 to 36. Nine new cases of typhoid fever were diagnosed, but no isolation of paratyphoid bacilli was made. Three newly born infants in hospital were infected with *Salm. typhi* and the source of infection was found to be the mother of one of the babies. She admitted to having had typhoid fever more than 20 years ago and presumably has been excreting typhoid bacilli in her faeces ever since; in view of this it is noteworthy that she was employed as a hospital cook before her recent pregnancy.

During the year the Provincial Laboratory provided facilities for a course lasting one week in advanced bacteriological technique for trained technologists who work in various hospital and other laboratories in the Province.

Virology

The virus division in Edmonton performed 58,589 examinations during 1967. No major epidemics of viral infection were studied in 1967, but a steady flow of positive results was reported by Dr. Morgante during the year. Outbreaks of respiratory disease due to adenoviruses, respiratory syncytial virus, mycoplasma species, and the

psittacosis group of organisms were investigated. Incidents of disease of the nervous system were shown to be due to Coxsackie viruses of Groups A and B, and mumps virus. The details shown in Table 7 indicate the wide range of viral and related agents that have been detected in Alberta in 1967. The list lengthens each year.

Other Services

The laboratory continued to store and issue anti-bacterial and antiviral vaccines and sera throughout the province. Members of the staff of the Edmonton laboratory continued their close and mutually beneficial association with the Departments of Pathology and Bacteriology of the University of Alberta and participated in the instruction of medical, nursing and technical students.

STAFF

Dr. R. D. Stuart, Director of the Provincial Laboratory since 1950, retired because of serious ill-health in April 1967. During the seventeen years that Dr. Stuart was in charge of the laboratory there were tremendous developments. The present quarters of the Edmonton laboratory were occupied and subsequently greatly extended to their present size, and the volume of work increased more than ten-fold, from less than 150,000 to more than 1,500,000 examinations annually. Furthermore, entirely new divisions of cytopathology and virology were established and developed. The Provincial Laboratory was indeed fortunate to have had such wise and far-seeing direction during such an important phase of its history. The excellent reputation of the laboratory not only throughout Canada but also overseas bears testimony to the high standard of work on which Dr. Stuart always and so rightly insisted.

Dr. Stuart was succeeded by Dr. J. M. S. Dixon, who was formerly Bacteriologist to the Wellesley and Princess Margaret hospitals, Toronto, and previous to that was Director of the Public Health Laboratory, Ipswich, England, for seven years.

At the Edmonton laboratory, Dr. B. Meilke returned to the Pathology Department in July after having spent a year in Baltimore, and Dr. Ian Geere joined the staff in November as Associate in Bacteriology. Dr. E. P. Crichton, Associate Pathologist at the Calgary laboratory since 1951, resigned in July on leaving Alberta, and Dr. C. Wood of the University of Maryland joined the staff there as a locum tenens Associate Pathologist for a period of one year.

Members of the staff of the laboratory attended medical and scientific meetings during 1967 in various parts of Canada and the United States, and a number of papers were read reporting work done in the Provincial Laboratory.

I am most grateful to all members of the staff of the laboratories for the loyal support they have given me since I was appointed director.

A tabular summary of the work of the laboratories in 1967 is presented below. Some change in the presentation of the statistics is envisaged for the future. As the complexities of laboratory tests increase, it is becoming increasingly difficult to define an "examination" and in the future it is proposed to give more emphasis to the number of specimens examined, a readily defined figure, than to the number of examinations.

APPENDIX

Papers published in 1967 by members of the staff, Provincial Laboratory

1. Dixon, J. M. S. (1967) Infection control in the operating room. *Canad. Hosp.*, **44**, 48 - 51.
2. Dixon, J. M. S. & Cuthbert, E. H. (1967) Isolation of tubercle bacilli from uncentrifuged sputum on pyruvic acid medium. *Amer. Rev. Resp. Dis.*, **96**, 119 - 122.
3. Herbert, F. A., Mahon, W. A., Wilkinson, D., Morgante, O., Burchak, E. C., & Costopoulos, L. B. (1967) Pneumonia in Indian and Eskimo Infants and children. *Canad. Med. Ass. J.*, **96**, 257 - 265.
4. Morgante, O. & Semanchuk, J. A. (1967) Virus of the California encephalitis complex: Isolation from *Culiseta inornata*. *Science*, **157**, 692 - 693.

TABLE 1
EXAMINATIONS PERFORMED IN THE PROVINCIAL
LABORATORIES
YEAR 1967

CONTROL OF COMMON INFECTIONS		
	Edmonton	Calgary
Diphtheria	38,179	13,535
Enteric and dysentery	29,506	3,948
Fungus infections	4,380	3,667
Intestinal parasites	950	241
Naso-pharyngitis	40,494	13,481
Tularaemia serology	883	462
Tuberculosis	25,901	4,318
Undulant Fever serology	883	462
Whooping Cough	107	13
OTHER DIAGNOSTIC AND MISCELLANEOUS		
Animal inoculations (other than T.B.)	317	17
Antibiotic sensitivities	503,573	212,930
Blood cultures	2,325	155
Leptospirosis	198	—
Miscellaneous	50,166	19,257
Paul-Bunnell test	909	996
P.M. Bacteriology	429	—
Referred cultures	5,009	72
Special investigations	17,145	15
Trichomonas	22,009	3,775
Virus infections	58,589	—
VENEREAL DISEASE CONTROL		
Gonorrhoea—Smears	3,561	6,418
Cultures	21,228	3,409
Syphilis	156,431	56,729
SANITARY BACTERIOLOGY		
Food Products	2,308	90
Water	27,736	15,323
Milk and Cream	—	44
Others	—	403
PATHOLOGY		
Diagnostic cytology—blood smears	96	137
cervical smears	57,248	15,633
bone marrows	100	7
fluids	3,880	276
Routine diagnostic histology blocks	41,664	8,252
Routine autopsy histology blocks	10,249	168
	1,126,453	384,293
	1,510,746	

TABLE 2
CONTROL OF ENTERIC-DYSENTERY INFECTIONS

EXAMINATIONS	Edmonton	Calgary
Blood and Clot cultures	477	338
Faecal cultures	27,401	2,844
Urine cultures	46	197
Other examinations	1,459	140
Serological tests	883	2,102

DETAILS OF ISOLATIONS

SALMONELLA

S. heidelberg	29	9
S. infantis	23	13
S. montevideo	6	6
S. newport	71	23
S. saint paul	12	7
S. thompson	5	1
S. typhi	9	9
S. typhimurium	59	23
Other Salmonella serotypes	38	17

SHIGELLA

Sh. flexneri	174	25
Sh. sonnei	92	26

ENTEROPATHOGENIC E. COLI

O23:B6	62	
O55:B5	13	
O111:B4	27	
O119:B14	81	
O127:B8	26	
O128:B12	15	
Other serotypes	57	

TABLE 3
CONTROL OF TUBERCULOSIS

EXAMINATIONS	Edmonton	Calgary
Microscopic	13,275	2,216
Cultures	12,587	1,480
Animal inoculations	1,639	622

SPECIMENS	No.	Positive	No.	Positive
Pulmonary	9,762	550	1,973	12
Meningeal	106	8	22	—
Renal	1,938	80	323	6
Other	866	38	282	3

TABLE 4
CONTROL OF SYPHILIS

CEREBROSPINAL FLUIDS—Wasserman	Edmonton	Calgary
(Kolmer)	856	927
BLOODS—VDRL	137,208	44,289
Wasserman (Kolmer)	15,083	8,036
Blood and cerebrospinal fluid reactive	717	286
Blood and cerebrospinal fluid giving reaction below laboratory diagnostic level	2,965	742
PRE-MARITAL BLOODS submitted according to Provincial Regulations	15,312	10,904
Reactive	10	1

TABLE 5
SANITARY CONTROL OF WATER

	Edmonton	Calgary
Water (number of specimens)	13,253	6,239
Coliform Test—Presumptive	13,158	5,573
Confirmed	3,153	820
Special	645	2,658
Plate Count	10,781	6,272
Waters considered bacteriologically unsuitable	640	820

TABLE 6
FUNGAL INFECTIONS

Total specimens examined	4,380
(including 1,508 referred from other departments)	
Skin, hair and nail specimens	2,316
Frequency of isolation or identification of dermatophytes:	
Dermatophytes = 473	
Trichophyton = 409	T. mentagrophytes 194
	T. verrucosum 113
	T. rubrum 102
Microsporum = 31	M. audouinii 1
	M. canis 30
Epidermophyton = 33	E. floccosum 33

TABLE 7
VIRUS INFECTIONS

Throat swabs for virus isolation	257
Faeces for virus isolation	283
Other specimens for virus isolation	212
Blood for serological examination	972
Blood for Paul-Bunnell test	981
Other specimens	4
Specimens inoculated into animals	192

POSITIVE FINDINGS	By Serology	By isolation of virus
Adenovirus	4	10
Coxsackie viruses A and B	—	5
Echo virus	—	2
Herpes Simplex virus	11	2
Influenza A virus	2	—
Measles virus	4	—
Mumps virus	8	—
Mycoplasma Pneumoniae	5	—
Parainfluenza virus	—	1
Polio virus	—	5
Psittacosis group	3	—
Reovirus	—	1
Respiratory syncytial virus	3	—
Not yet identified	—	13

TABLE 8
SERA AND VACCINE DISTRIBUTED

	Edmonton
BIAD (Tetanus-Polio Vaccine)	10 cc 941
Diphtheria Antitoxin	1,000 units 378
Diphtheria Antitoxin	40,000 units 144
Diphtheria Toxin for Schick Test	25 persons 1,391
Diphtheria Toxoid	3 x 1 cc 803
Diphtheria Toxoid	6 x 6 cc 110
Diphtheria Toxoid dilute, for reactors	4 x 1 cc 555
Diphtheria Toxoid for sensitivity test	2½ cc 33
D.P.T.	3 x 1 cc 7,112
D.P.T.	6 x 6 cc 1,194
D.T.	3 x 1 cc 5,739
D.T.	6 x 6 cc 1,840
Gas Gangrene Antitoxin	10,000 units 781
Immune Serum Globulin	2 cc 1,346
Immune Serum Globulin	5 cc 4,195
Poliomyelitis Vaccine	10 cc 2,907
QUAD	10 cc 11,547
Measles—killed	10 dose 10,536
Measles—live	1 dose 13,485
Measles—live	5 dose 7,198
Rabies Antiserum	1,000 units 32
Rabies Vaccine	14 x 2 cc 24
Rocky Mountain Spotted Fever Vaccine	3 cc 155
Rocky Mountain Spotted Fever Vaccine	20 cc 72
Sabin Oral Vaccine	20 dose 15,150
Scarlet Fever Antitoxin	9,000 unit —
Smallpox Vaccine	1 point 3,356
Smallpox Vaccine	10 point 16,109
Snakebite Antivenin	10 cc 16
Staphylococcus Antitoxin	20,000 units 66
Staphylococcus Toxoid	2 x 2 cc 1,580
Tetanus Antitoxin	1,500 units 1,588
Tetanus Antitoxin	20,000 units 89
Tetanus Toxoid	3 x 1 cc 5,313
Tetanus Toxoid	30 cc 653
T.A.B.	1 person 1,793
T.A.B.	10 cc 612
T.A.B.T.	3 cc 2,935
T.A.B.T.	25 cc 607
Rabies Vaccine (Duck Embryo)	1 dose 57

DEPARTMENT OF HEALTH

TABLE 9
MINIMUM COMMERCIAL VALUE OF WORK PERFORMED
(AT RATE OF CURRENTLY RECOMMENDED PROVINCIAL SCALES WHERE APPLICABLE)

EXAMINATIONS	Edmonton	Value	Calgary	Value	Total
Diphtheria	38,179	\$ 114,537	13,565	\$ 40,695	\$ 155,232
Enteric dysentery	29,506	147,530	3,948	19,740	167,270
Fungus infections	4,380	17,520	3,667	14,668	32,188
Intestinal Parasites	950	4,750	241	1,205	5,955
Naso-pharyngitis	40,494	80,988	13,481	26,962	107,950
Tularaemia serology	883	1,766	462	924	2,690
Tuberculosis	25,901	155,406	4,318	25,908	181,314
Undulant Fever serology	883	1,766	462	924	2,690
Whooping Cough	107	214	13	26	240
Animal Inoculations (other than T.B.)	317	1,585	17	85	1,670
Antibiotic sensitivities—disc	503,573	167,858	212,960	70,987	238,845
Blood Cultures	2,325	11,625	155	775	12,400
Leptospirosis	198	990	—	—	990
Miscellaneous	50,166	100,332	19,257	38,514	138,846
Paul-Bunnell test	909	3,636	996	3,984	7,620
P.M. Bacteriology	429	1,716	—	—	1,716
Referred Cultures	5,009	20,036	72	288	20,324
Special Investigations	17,145	85,725	15	75	85,800
Trichomonas	22,009	44,018	3,775	7,550	51,568
Virus infections	58,589	703,068	—	—	703,068
Gonorrhoea—Smears	3,561	7,122	6,418	12,836	19,958
Cultures	21,228	84,912	3,409	13,636	98,548
Syphilis	156,431	782,155	56,729	283,645	1,065,800
Food Products	2,308	9,232	90	360	9,592
Water	27,736	55,472	15,323	30,646	86,118
Milk and Cream	—	—	44	196	196
Other	—	—	403	1,612	1,612
Diagnostic Cytology—blood smears	96	480	137	685	1,165
cervical smears	57,248	286,240	15,633	78,165	364,405
bone marrows	100	1,000	7	70	1,070
fluids	3,880	19,400	276	1,380	20,780
Routine diagnostic histology	41,664	416,640	8,252	82,520	499,160
Routine autopsy histology	10,249	153,735	168	2,520	156,255
TOTALS	1,126,453	\$3,481,454	384,293	\$ 761,581	\$4,243,035

DIVISION OF ENVIRONMENTAL HEALTH SERVICES

H. L. Hogge, B.Sc., P.Eng., Director

This Division of the Department administers the programs designed to maintain a healthy public environment in Alberta. In particular, the control of air and water pollution, public waterworks and sewerage systems, swimming pools, plumbing, and co-ordination of public health inspection services, are areas of responsibility.

The recent, and still current, urban population and industrial growth in the Province has required specialization and expansion in the organization of the Division so that in 1967 we have six separate sections of the Division. These are:

1. AIR POLLUTION CONTROL
2. WATER POLLUTION CONTROL
3. MUNICIPAL ENGINEERING
4. ENVIRONMENTAL HEALTH SERVICES LABORATORY
5. PUBLIC HEALTH INSPECTION
6. PLUMBING INSPECTION

The Division of Environmental Health Services of the Department is responsible to the Minister through the Deputy Minister of Health. In Alberta, the administrative authority for the control of the public health function outlined above is the Provincial Board of Health. This Board is the "approving" authority and, subject to the approval of the Lieutenant Governor in Council, may make and issue orders, rules and regulations respecting these and other matters as provided for in The Public Health Act. The Provincial Board of Health is composed of the Provincial Medical Officer (Deputy Minister of Health) as Chairman, and the Director of the Division of Environmental Health Services and the Director of the Provincial Public Health Laboratories as members.

In addition to the normal functions of the Division, members of the staff have participated during 1967 in the work of two special Committees. One Committee is entitled "Solid Wastes Disposal Study Committee", with 14 members and its purpose is to study all pertinent aspects of waste disposal practices in Alberta, with particular reference to the Calgary and Edmonton areas. The other Committee is entitled "Alberta Advisory Committee on Pollution Control" with 87 members and is advisory to the Minister of Health, the Honourable Dr. J. Donovan Ross. A total of 12 sub-committees have been formed to consider specific areas such as research, air and water quality criteria, specific areas of water or air pollution significance, and public information.

The specific work carried out by the various Sections of the Division during the calendar year, 1967, has been summarized by the 'Head' of each Section and is presented below.

1. AIR POLLUTION CONTROL SECTION

Mr. S. L. Dobko, P.Eng., Head

During 1967 the work of the Air Pollution Control

Section in general has continued to expand in quantity in certain areas as it has in the previous years. The Section's work was directed at controlling the pollution from new industrial plants locating in Alberta, assessing and reducing, if necessary, the pollution from various industrial operations already in existence in Alberta utilizing the latest developments and techniques, assessing the level of pollution in the atmosphere in urban areas as well as in the vicinity of industrial operations throughout the Province.

Besides the 'Head' of this section, the staff consists of one senior Engineer, three junior Engineers, two senior Laboratory Technicians, four Laboratory Technicians and one Laboratory assistant. In addition to this, from approximately May to September, there are three summer positions which are filled usually with two engineering students (going into third or fourth year of their studies) and one technical student who has completed the first year of his two-year program.

Due to the fact that we were unable to fill one of the engineering positions which was still vacant at the end of the year, we employed this past summer an additional university student to cover the vacant position and thus enable us to carry out to a good degree the scheduled work load.

I OPERATION OF MOBILE LABORATORIES

Two mobile air pollution laboratories were operated on a continuous basis throughout the province. These units, as in previous years operated by technicians of this Division, were utilized to investigate complaints and observe general air pollution levels in the vicinity of gas processing plants and in sour oil field areas measuring sulfur dioxide and hydrogen sulfide levels along with a number of meteorological parameters such as wind, temperature, humidity and barometric pressure.

In the 1967 calendar year 29 surveys were carried out in 21 different areas.

Unit No. 1585 operated a total of 330.5 days with 34.5 days lost due to moving of the unit, mechanical difficulties and annual equipment overhaul. The other unit, No. 1646, operated for a total of 335.25 days and 29.75 days were lost due to moving of the unit, mechanical difficulties and annual equipment overhaul.

Also operated by the mobile trailer operators were additional H₂S samplers at two other locations near the sites of the mobile laboratories for a total of 32.75 days.

II PERMANENT FIELD MONITORS

The Division is presently maintaining 152 exposure cylinder stations for the determination of H₂S and 156 exposure stations for the determination of SO₂. This is a net increase of 18 stations (approximately 13%) over last year. Also located throughout the province are 45 stations which are maintained for the determination of dustfall. In addition to the above, 7 fluoride monitoring stations are

being maintained. These stations are changed on a monthly basis and are analyzed by the Environmental Health Services Laboratory.

III POLLUTION SOURCE SURVEYS:

To check if plant operations were in compliance with the Air Pollution Regulations or within their approval conditions, 15 source surveys were undertaken for the determination of SO_2 , 5 for particulate and 2 for (particulate, fluoride, ammonia and phosphates). The total for the year is 22, an increase of 6 over last year.

In order to evaluate existing air pollution control facilities and to make recommendations for proper air pollution control 23 plant tours were taken.

IV INCINERATORS:

Since the publication of the 'Incinerator Standards for the Province of Alberta' there has been an increasing number of submissions to be reviewed. This year there was a decrease in the number of applications processed but this is not unreasonable as last year the increase was 216% over the previous year. The number of applications given approval this year was 129, a decrease of 57 from 1966.

V APPROVALS ISSUED TO EXISTING PLANTS AND NEW INDUSTRIES:

Approvals were given to 23 new plants for air pollution control facilities at their establishments. In addition 11 approvals were given to plants which were in existence prior to 1961 or which were expanding or changing some of their previously established operations.

VI EFFECT OF SO_2 UPON VEGETATION:

To study the effect of SO_2 upon vegetation, samples were again collected in the vicinities of gas plants. In total, 417 samples were gathered by members of this Division and the Department of Lands and Forests and all of the analysis done by the Environmental Health Services Laboratory of this Division.

VII SPECIAL PROJECTS:

A meteorological research project was initiated at Calgary and Edmonton under a contract with Geoscience Research Associates Ltd. Basically this project involves the study of meteorological conditions and parameters as they pertain to the cities of Calgary and Edmonton and includes such items as "Heat Island Effect" (horizontal and vertical temperature measurements), "Inversion Measurements" (vertical temperature structure), and "Low and High Level Wind Measurements".

In connection with this project, the installation of temperature inversion measuring equipment purchased in 1966 was completed on the C.N. Tower building in Edmonton. Additional equipment for this project, including a tower, vertical temperature measuring equipment, wind speed and direction equipment and thermographs were ordered and some of this equipment had been delivered by the end of the year. This project also included a mobile system whereby vertical temperatures would be measured up to heights of 750 feet utilizing a buoyant helium filled kytoon.

Another research project was initiated this year for us by the University of Calgary. This involves a study on atmosphere dispersion of pollutants and the prediction of the same by the use of mathematical models utilizing a computer for high speed calculations. Work on this project has been progressing quite well and basic ground work has been carried out for the project.

VIII MAINTENANCE AND CALIBRATION OF EQUIPMENT:

To prevent major downtime in the operation of the pollution monitoring equipment a routine maintenance and calibration schedule was continued. This work is essentially carried out by the senior laboratory technicians.

IX URBAN MONITORING:

As in the previous year, there are 6 smoke samplers operating in Edmonton and 2 in Calgary.

During 1967, high volume samplers were operated in both Edmonton and Calgary. The samplers operated on a random schedule of approximately 4 sampling days per month.

An oxidant analyzer was placed in Calgary to operate on a continuous basis. The oxides of nitrogen and oxidant analyzer continued to be operated in Edmonton and a hydrocarbon analyzer was placed into service here as well; however, due to operating problems with the instrument no useful record of data was obtained.

X COMPUTER PROGRAMS:

In 1967 an addition was written to the monthly Edmonton and Calgary reports to correlate the different pollutants with the wind.

Another program was written to calculate atmospheric concentrations of sulphur dioxide and hydrogen sulfide directly from the laboratory analysis of permanent field monitors thus saving time in the calculations of these concentrations then transcribing them twice before they went on the computer.

XI SPECIAL STUDIES:

The investigation of oil field operations in respect to battery operations in the Valleyview area that was commenced in 1966 was continued and finalized in 1967.

Investigations in two other areas, Nevis and Harmattan, were carried out where a high frequency of complaints were received due to the operations of gas plants and remedial recommendations were made.

XII INVESTIGATION OF COMPLAINTS:

Ninety-eight complaints of air pollution were investigated and corrective solutions were asked for, where complaints were verified.

XIII SEMINARS, COURSES, CONFERENCES:

A seminar was held in conjunction with the Meteorological Research Project and included representatives of the Air Pollution Control Section, the Director of this Division and the representatives of Geoscience Research Associates Ltd. who are carrying out the meteorological study. The purpose of this seminar was to familiarize both sides with each other's work and to get a better understanding of the

aims and purposes of the meteorological study as it pertains to air pollution and the reverse.

XIV ADVISORY COMMITTEES:

An Alberta Advisory Committee on Pollution Control was established in 1967. Within the structure of this Committee, five Sub-committees were set up to deal with various areas in air pollution, these being:

1. Air Pollution Research.
2. Air Quality Criteria.
3. Air Pollution Control — Edmonton.
4. Air Pollution Control — Calgary.
5. Air Pollution Control — Sour Gas & Oil Industry.

2. WATER POLLUTION CONTROL SECTION

Mr. E. E. Kupchanko, M.Sc., P.Eng., Head

The Water Pollution Control Section continued in its activities of assessment and control of water pollution in Alberta. This was accomplished by regulating municipal and industrial waste waters and other materials released or allowed to escape to surface waters. The staff was increased by one engineer and two technicians. The temporary summer technical assistant was switched to a winter position due to the increased work load during this time of year. The staff now consists of two engineers and four technicians all supervised by the Head of the Section.

The comprehensive water pollution assessment program was continued during the year co-ordinating waste water discharges to overall river performance. Increased utilization of data processing facilities was completed and several extensive programs are presently being utilized to aid in the handling and interpretation of chemical and bacteriological analyses of the river and industrial effluents. Similarly, a rapid notification of industries of the assessments of discharges and their relationship to the receiving waters has been incorporated. Consolidation of analyses into an overall river basin management scheme is continuing.

Winter field sampling methods have been improved and additional sampling equipment has been obtained to facilitate sampling under adverse conditions. Less time is now involved with analytical methods resulting in superior and more representative samples.

The techniques of sampling with the carbon filter apparatus has been improved and the increased utilization of this method for determining organic constituents is planned.

A set of "Water Quality Criteria" for the North Saskatchewan River was drafted and it is hoped a further refinement of Water Quality Objectives for other rivers in the Province will be completed.

A meeting was held May 25th to review the Water Quality in the North Saskatchewan during the 1966-67 period. The meeting was attended by representatives of the Alberta Department of Health, Saskatchewan Water Resources Commission Public Health Engineering Office, the Manitoba Department of Health, the Federal Public Health Engineering office at Ottawa, the industries located along the North Saskatchewan River in Alberta and the larger

municipalities situated adjacent to the North Saskatchewan River in Alberta.

Sampling was again broadened this year with the Canadian Salt Company at Lindbergh assisting the department in determination of dissolved oxygen values on a daily basis during critical times of the year. These results will enable the department to maintain a continual assessment of this prime water quality parameter as the water leaves the province.

Land and trailer have been acquired for the automatic monitoring station near Redwater and this station will be in operation as soon as the monitoring equipment is received.

Sixteen approvals for the release and control of waste waters by industrial concerns were granted during the year.

During the 1967 season, 23 applications for addition of chemical for the control of aquatic weeds were received. Of this total, seven applications were granted Provincial Board of Health Approval while the remaining were not accepted.

A more detailed summary of the Water Pollution Control Program during the calendar year, 1967, is presented below:

I RIVERS

a) North Saskatchewan River:

The North Saskatchewan River was sampled on a regular basis during the winter months of 1967. Weekly samples were taken at Fort Saskatchewan Bridge and at Vinca Ferry, while the other locations: Edmonton 105 St. Bridge, Waskatenau Bridge, Duvernay Bridge, Elk Point Bridge and Lloydminster Ferry were sampled bi-weekly. Drayton Valley Bridge and the Brazeuz Dam which are the upstream locations were sampled twice during the year.

Activated carbon absorption studies for organic contaminants have been extended to include an upstream location at Devon (Devon Water Treatment Plant). Studies were also conducted at Fort Saskatchewan (Sherritt Gordon Water Treatment Plant) and Lindbergh (Canadian Salt Company Water Treatment Plant).

Twenty-four hour composite sampling surveys were completed in January and again in December. These surveys included all municipal and industrial waste effluents between Devon and Waskatenau.

Bacteriological sampling has been increased during 1967. Samples are now obtained at all locations during each survey of the river.

The total number of river samples taken in 1967 were 218 compared to 162 for the previous year. Fifty-six of these samples were for bacteriological studies.

b) The Bow River

Five week-long surveys were conducted on the Bow River during 1967 representing a total of 45 samples taken from five locations downstream from Calgary. A survey was conducted in August immediately after the "fish kill" in the Bow River. Indications were that the kill was due in part to a high ammonia content in the river water.

Chemical and bacteriological studies of the river water from Banff to Calgary was again made during 1967. This survey includes waste water from all sources in Banff National Park whose effluent enters the Bow River.

Taste and odor studies in trout were again conducted

as in the previous year, with the assistance of the staff at the Calgary Fish Hatchery. The 1967 program was different in that only the tests to determine if the river water would impart taste and odor to fish, were made; previous studies sought also to determine the concentration of contaminants at which objectionable tastes and odors were evident.

c) The Oldman River

Four surveys of the Oldman River were conducted during 1967 in comparison with three surveys made in the previous year. A greater emphasis has been placed on the assessment of the river water during late fall. Sugar factory waste combined with low flow and ice cover on the river makes this period the most critical from the standpoint of water quality.

d) The Athabasca River System

The Athabasca River System was sampled on a once-per-month basis, during the winter season from Hinton to Tar Island representing a total of 45 samples taken from seven locations, five on the Athabasca River, and one location each on the Lesser Slave and McLeod Rivers. The McLeod River was sampled on a less frequent basis.

A special investigation in the late summer was made on the river from the head waters at the Columbia Ice Fields in Jasper Park to Hinton. This survey included the waste waters from all major sources within the park proper. Fourteen samples were taken, seven of which were for bacteriological analysis.

e) The Red Deer River

Three surveys of the Red Deer River were completed in 1967. These included samples from the South Saskatchewan River near Empress and at Medicine Hat.

Sampling at Content Bridge has been increased due to a number of complaints from this area. Greater emphasis on samples from the gas plants in this area are now being taken during each Red Deer River survey to evaluate more fully the effects of the industrial wastes on the river.

f) The Peace River System

The rivers included in this system are: The Wapiti River, Smoky River and the Peace River. The five locations on the Peace River System were sampled once during 1967.

g) Other Rivers

The Blindman River, Milk River, Sheep River, Beaver River, Marie Creek and Tail Creek were sampled once during the calendar year. Sampling usually coincided with surveys of larger rivers or where ponded industrial effluents are released periodically.

II INDUSTRIES

A greater effort has been made in 1967 to correlate the quality of industrial effluent with that of the receiving waters, resulting in 40 industries being sampled. The greater portion of these industries were composite sampled for 24 hours in conjunction with river surveys. The following is a breakdown of the number of samples taken of industries associated with river courses:

River	Industrial Samples
1. Oldman River	6
2. Bow River	22
3. Red Deer River	24
4. Athabasca River	16
5. McLeod River	8
6. North Saskatchewan River	100

Industries such as gas and sulphur plants and gravel washing operations were sampled on a less frequent basis. A total of 39 samples were obtained from these sources.

III DOMESTIC SEWAGE EFFLUENT

a) Edmonton Sewage Treatment Plants

Composite samples from the sewage treatment plants in Edmonton were taken on a monthly basis during the winter season. Monthly sampling of the packing plant lagoons has been discontinued. These samples are now obtained once per year during the release of the ponded waste in the spring.

b) Calgary Sewage Treatment Plants

Surveys of the sewage treatment plants in Calgary were increased to five from the three surveys in the previous year. A total of thirty 24-hour composite samples of both influent and effluent were obtained from Fish Creek, Ogden and Bonnybrook Sewage Treatment Plants.

c) Southern Alberta Sewage Treatment Plants

Twenty-four hour composite samples from the two sewage treatment plants in Lethbridge were taken during four week-long surveys in the Southern Alberta area. This represents thirty samples, four of which were grab samples from the Taber Sewage Treatment Plant.

d) Other Sewage Treatment Plants

Twenty-two other sewage samples were obtained during the year; surveys were conducted at Banff and Jasper National Parks and at the Canadian Forces Base at Cold Lake.

The foregoing report summarizes the activities of the Water Pollution Control Section during 1967. In addition to this program investigation of complaints and studies of a minor nature extended throughout the year.

3. MUNICIPAL ENGINEERING SECTION:

Mr. R. N. Briggs, M.Sc., P.Eng., Head

Work in the Municipal field increased in 1967 with 256 submissions for new water and/or sewage systems and for extensions to existing systems, as well as 11 public swimming pools and 18 semi-public swimming pool submissions.

With a complete staff the number of field inspections increased by approximately 70% over 1966 and 67% of the communities with water and/or sewer systems were inspected.

Fluoridation of public water supplies continues to increase. There are now 35 communities either fluoridating their water or have passed their fluoridation bylaws.

The Operator's Schools continued to be very well

attended and there are 20 operators of Water Treatment Plants that completed the W.C.W.S.C. correspondence course who will be writing their exams in 1968.

University students were again hired for summer work, which enabled us to check several sewage systems which otherwise would not have been checked. Certification of Water and Sewage system operators and the respective system was commenced during the summer. It is expected that this will be completed in 1968.

WATERWORKS AND SEWERAGE SYSTEMS

As required by The Public Health Act any new or extensions to existing water and/or sewage systems must be approved by the Provincial Board of Health. During 1967 there were 256 such approvals recommended to the Board. Of these, 69 were for the Provisional approval and 187 were for Final approval authorizing construction of the project. This is an eleven percent increase over the number of Certificates issued in 1966.

The estimated value of the 187 final certificates was \$19,974,878.31. TABLE I shows the number of final certificates and the value of same since 1953.

The certificates issued and their estimated cost have been broken down into five basic categories and are given in

TABLE II.

As of December 31, 1967, there were 274 communities serviced with water and/or sewerage systems; 233 communities have water systems, 12 of which do not have sewage systems; 242 communities have sewage systems 21 of which do not have waterworks systems.

There were 5 waterworks systems and four sewage systems installed or approved for six communities during 1967. The communities, and their respective systems which were installed are given in TABLE III. TABLE III also shows three systems which were not previously recorded.

It is interesting to note that there is only one community with over 1000 population that does not have a waterworks system (Sylvan Lake which has private wells) and one that does not have a sewage system (Bellevue). In addition, there are only two towns without waterworks systems, and one without a sewage system in the 500 to 1,000 population range. Additional statistics in this regard are provided in TABLE IV.

During the year, 398 inspections of water and/or sewerage systems were made to 183 of the communities so serviced. This includes inspections of complaints, follow-up inspections and general inspections.

TABLE I
REVIEW OF FINAL CERTIFICATES AND ESTIMATED COST OF WATER AND SEWAGE WORKS PROJECTS

Year	No. Issued	Estimated Cost	Year	No. Issued	Estimated Cost
1953	97	\$12,465,396	1961	172	\$18,876,977
1954	109	\$16,455,810	1962	184	\$ 9,427,465
1955	107	\$17,524,020	1963	146	\$ 8,818,845
1956	99	\$15,803,935	1964	180	\$33,758,486
1957	110	\$11,430,812	1965	195	\$16,632,629
1958	132	\$ 9,795,223	1966	176	\$16,895,259
1959	160	\$15,733,142	1967	187	\$19,974,878
1960	189	\$16,820,264			

TABLE II
CERTIFICATES ISSUED DURING 1967

Provisional Certificates			Final Certificates		
No. Issued	Estimated Cost		No. Issued	Estimated Cost	
A. New Systems					
Water 12			9		
Sewer 9			7		
TOTAL 21	\$2,193,240.00		16		\$1,798,871.00
	(12 communities, 2 miscellaneous)				
B. Water & Sewer Extensions					
24	\$1,651,975.00		116		\$8,128,430.05
	(57 Communities, 4 miscellaneous, 3 superseded, 1 cancelled)				
C. Water Treatment, Supply & Storage					
21	\$1,645,416.70		26		\$916,132.00
	(35 communities, 1 superseded)				
D. Sewage Treatment					
3	\$17,429,000.00		16		\$6,561,738.76
	(17 communities)				
E. Storm Sewers					
None Issued			13		\$2,569,706.50
			(13 communities)		
TOTAL 69	\$22,919,631.70		187		\$19,974,878.31

TABLE III
COMMUNITIES WITH NEW WATER AND/OR SEWER SYSTEMS
1967

Community	Water	Sewer
Craigmyle	##	
Fort Chipewyan	##	
Fox Creek	##	#
Halkirk*	##	
Midlandvale*	##	
Minburn		#
Nacmine*	##	
Rainbow Lake	##	##
Rosalind	##	

*Water or Sewer systems installed prior to 1967 but not previously recorded.

TABLE IV
SUMMARY

Population Group	Number of Communities	Number Served With Waterworks	%	Number Served With Sewerage	%
Over 10,000	6	6	100	6	100
3,000 - 10,000	21	21	100	21	100
1,000 - 3,000	49	48	98	48	98
500 - 1,000	45	43	95.5	44	97.8
300 - 500	43	37	86	41	95.4
150 - 300	76	60	79	63	83
Under 150	34	18	33	19	56
TOTAL	274	233	85	242	88.5

NOTE: Jasper, Banff, Waterton not included.
Hamlets with neither water nor sewerage systems not included.
Institutes not included.

SWIMMING POOLS

The Municipal Engineering Section is responsible for the approval and initial inspection of both public and semi-public swimming pools. 1967 showed a marked increase in pool construction in the Province with a total of 9 public and 10 semi-public pools being approved for construction.

During 1967 a total of 18 public pools and 22 semi-public pools were inspected, many of which were requested by the various local Health Units throughout the Province.

A hi-rate sand filter test was conducted at the Vermilion Swimming Pool for a period of one week in August, 1967. The results obtained during the test period indicated that a high rate of filtration could produce a water of acceptable quality in swimming pools where light or no continued heavy bathing loads are encountered.

PUBLIC POOLS

Plans and specifications for 11 new public pools were submitted for approval in 1967. Of these, approval for

construction was granted for the following 9 pools:

- 1) Barrhead
- 2) Calgary - Shouldice
- 3) Castor
- 4) Champion
- 5) Coronation
- 6) Forestburg
- 7) Milk River*
- 8) St. Albert
- 9) Spirit River

* This pool has not been constructed.

The two other public pool submissions are still pending and are expected to be approved early in 1968. These pools are at Didsbury and Medicine Hat.

In addition to the construction of new pools, plans were submitted for renovations and additions to 5 existing public pools. The submissions for the 4 pools listed below were approved:

- 1) *Edmonton - Borden Park
- 2) *Edmonton - Fred Broadstock
- 3) *Lethbridge - Fritz Sick
- 4) *Strathmore
- 5) Fort Saskatchewan

* Approved in 1967.

SUMMARY

There are now 89 public swimming pools and 101 semi-public swimming pools in the Province. A detailed breakdown of the total number of pools is presented in TABLE V.

TABLE V
SWIMMING POOL STATISTICS TO DECEMBER 31, 1967

CATEGORY	NUMBER
Public Pools	89
Semi-Public Pools	101
—Motels - Hotels	39
—Apartments	27
—Clubs	24
—Institutes	4
—Camps	7
National Park Pools	10
Department of National Defence Pools	7
TOTAL	207

FLUORIDATION

Fluoridation of Municipal water supplies is under the control of this Section.

Monthly reports from the communities fluoridating are forwarded to this Section for checking and to determine the fluoride residual, based on the amount of chemicals added and water treated. When a report indicates a high reading the respective community is notified and requested to adjust their feed rate.

In addition to the monthly reports a yearly summary is prepared for each town and the respective fluoridation program reviewed.

A list of the communities now fluoridating their water supplies as well as those places which have approved their fluoridation bylaws is given in TABLE VI.

TABLE VI
COMMUNITIES WHICH HAVE FLUORIDATED WATER SUPPLIES
OR HAVE PASSED THE FLUORIDATION BYLAWS

Year of Installation	Communities	1967 Population
1958	Fairview	1,884
	Red Deer	26,173
1959	Devon	1,283
	Grande Prairie	11,417
1960	Innisfail	2,531
1961	Bonnyville	2,275
1962	Athabasca	1,672
	St. Albert	9,828
	Fort Saskatchewan	4,277
	Leduc	3,029
1963	Beaumont	194
	Coaldale	2,541
	Peace River	5,024
1964	Ralston	2,000
	Barrhead	2,718
	Kinuso	376
	Mayerthorpe	961
	Milk River	861
	Redwater	1,041
1965	Bow Island*	1,160
	Whitecourt	2,502
1966	Cardston*	2,721
	Drayton Valley*	3,352
	Eik Point*	775
	Hanna*	2,633
	Picture Butte	1,013
	St. Paul*	3,655
1967	Drumheller	3,574
	Edmonton	381,230
	Grand Centre*	1,746
	Hinton*	4,461
	Taber*	4,561
	Vegreville	3,533
	Westlock*	2,792
	Sherwood Park	5,000

*Approved but not Fluoridating

SAMPLING

The amount of sampling from water systems and sewage systems and swimming pools is continuing to increase. This year there was a 68% increase in the number of samples lifted. This is due to the increase of staff and the hiring of summer students which has permitted us to assist the operators of water and sewage systems and to conduct surveys of existing systems.

A breakdown of the samples taken is as follows:

Type of Sample	River, Tap, Well, etc.	Fluorides	Sewage	Misc.	Total
No. of Samples Tested	99	200	138	32	469

It is expected that more time will be required for the assistance of water and sewage treatment plant operators and also in controlling these systems. This will further increase the number of samples submitted to Environmental Health Services Laboratory.

SCHOOLS

The Water and Sewerage Operator's Schools were continued in 1967. Two schools were held; a second year with 73 operators in attendance and a graduate school with 65 operators in attendance.

To date attendance figures for these schools are as follows:

(a) Completed first year course	394
(b) Completed second year course	318
(c) Completed third year course	216
(d) Completed graduate schools	151
(e) Number of communities represented	178

Due to the numerous inquiries regarding the schools a first year school will be held in 1968. This school was originally scheduled for 1969.

On completion of each year's schools, a book is prepared which contains copies of all papers presented at the school. These books normally run to about 120 pages.

STAFF

The Municipal Engineering Section now has a complete staff which consists of four Engineers and a Technician.

In addition, two university students were employed during the summer of 1967.

OTHER AREAS

A. Western Canada Water & Sewage Conference Correspondence Course

This course is a 13-lesson correspondence course on Water Treatment for the operators of Water Treatment Plants. Although the course is under the jurisdiction of the W.C.W.S.C. it is supervised by this Section.

TABLE VII gives the statistics regarding this course. There has been a high degree of interest in the course as indicated by the fact that there are presently 27 men enrolled in the current session.

TABLE VII
W.C.W.S.C. CORRESPONDENCE COURSE FOR
WATER TREATMENT PLANT OPERATORS IN ALBERTA

	1962	1963	1964	1965	1966	1967	Total
Number taking course	28	16	—	1	2	23	70
Number Completing Course..	14	6	—	1	1	11	33
Number Passing Course	12	6	—	1	1	+	20
Number of Communities Represented	20	12	—	1	1	13	—

*The eleven men who completed the course in 1967 will be writing their exams during January 1968.

B. Health Units

Health Unit officers were visited during inspection trips to see if any problems concerning water and sewage systems had been drawn to their attention. Related problems often occurred, being either of a general engineering nature, or specific water and/or sewerage problems, or of questions concerning the Division of Environmental Health Services generally.

C. Microfilming

The backlog of correspondence and drawings was completed and Microfilming of current data will be completed on a yearly basis.

D. Classification of Operators and Treatment Plants

Certification of Operators and their respective systems was commenced in the summer of 1966 with the assistance of P. H. Bouthillier.

Certification of systems is being classified in four categories, namely: Water treatment, water distribution, sewage collection, sewage treatment. Operators are being classified with respect to the systems they operate, their experience and education, and courses attended.

There is considerable work in classifying these systems and operators, however, we expect that it will be operational in 1968.

E. Publications

The following publications were distributed or prepared during 1967.

- (a) Standards for Water Supply and Sewage
- (b) A Survey of Water and Sewage Systems in Alberta
- (c) Swimming Pools in the Province of Alberta
- (d) 2nd Year Operator's Manual
- (e) Graduate School Operator's School

4. ENVIRONMENTAL HEALTH SERVICES LABORATORY

Mr. W. E. Kortsch, Head

The work has continued to expand significantly. Emphasis was put on planning and introducing methods and instruments enabling the laboratory to meet requirements for specialized analytical studies in preventing pollution problems and counteracting specific pollution situations.

A — Samples Analyzed

	Number of Samples	Number of Tests
1. Water Pollution Control Section		
River Water	409	
Industrial Waste Water	211	
Sewage	132	
Carbon Filter	3	
Miscellaneous	21	
Total	776	7604
% Increase over Number in 1966	—1	24
2. Municipal Engineering Section		
River, Well, Tap Water, Swimming Pool Water	99	
Drinking Water for Fluorides	200	
Sewage	138	
Miscellaneous	32	
Total	469	2449
% Increase over Number in 1966	68	72
3. Air Pollution Control Section		
Total Sulfation	1640	1640
Hydrogen Sulfide	1531	1531
Dustfall	482	482
Water Soluble Calcium in Dustfall		136
Hydrochloric Acid Soluble Calcium in dustfall		136
Heavy Metals in Dustfall (lead, copper, zinc, nickel)		101
Total Suspended Particulate Matter	94	94
Benzene Extractable Organic Com- pounds in Suspended Particulates		21
Heavy Metals in Suspended Particulates (lead, copper, zinc, cadmium)		64
Fluorides	77	77
Vegetation for Total Sulfur	417	417
Stack Samples	32	39
Miscellaneous	11	11
Total	4284	4749
% Increase over Number in 1966	11	13
Overall Total (all three sections)	5529	14,802
% Overall Increase over Number in 1966	13	26

Especially significant is the steadily growing demand for more detailed analyses which is reflected in the 26% increase of the total number of tests over the year 1966.

B — Analytical Work for Other Departments

1. Total sulfur determinations of Lichen samples were performed in conjunction with surveys conducted by the Crop Clinic, Department of Agriculture, in conjunction with our Division.

2. In conjunction with a survey of well water samples conducted by the Oil and Gas Conservation Board Laboratory, samples were analyzed for pH, Biochemical Oxygen Demand, Ammonia, Chlorides and Threshold Odor Number.

C — Change in Laboratory Organization

Considering the initially mentioned necessity for conducting specialized analytical studies requiring complex methods and instruments, the laboratory was divided in two branches, the "Routine Analysis" and the "Non-Routine Analysis".

1. Routine Analysis Branch

Most of the tabulated analytical work (Section A) was performed in this branch.

In addition "internal" studies were conducted in order to keep the quality of performance at high standards.

- a. The accuracy of the phenol test in the range of 1 to 10 ug/l was determined with the result that the lower detectable limit is 1 and the average deviation 0.5 ug/l. This determination is based on 70 single tests.
- b. After considerable investigations and changes in published procedures the Brucine method for Nitrate tests and a method for Total Phosphate tests was adopted.
- c. The Fluoride Electrode, available since 1966, was carefully checked and found excellent for river, tap, and well water, thus replacing the time consuming distillation method. Some industrial effluent samples obviously were causing difficulties. The survey in this respect is continuing.
- d. Studies on Chemical Oxygen Demand determinations were sulfur determinations of lichen samples concentration on the degree of oxidation. Results indicated that such influence is non-existent.

Chemical Oxygen Demand tests on various organic compounds of such nature were performed which are giving concern regarding the oxidation effectiveness. The oxidation percentage was determined. This survey will be continued.

- e. Investigations were initiated for scanning industrial waste effluent, and pond samples in the Ultra-Violet wavelength range. First results indicated that it is hardly possible to identify specific compounds, but by testing a sample from time to time the change of compound structure towards a final state of oxidation should become evident. This would help to evaluate specific wastes.
- f. The influence of various types of filter paper, filter aid, and activated charcoal for contributing and adsorbing various cations and ions to and from aqueous samples was investigated.
- g. A test procedure for arsenic was introduced and used.
- h. In view of the soap and detergent industry's replacement of Alkyl Benzene sulfonate (ABS) surfactant with the biodegradable linear Alkylate Sulfonate (LAS), a standard calibration solution was obtained from the Soap and Detergent Association, New York, N.Y., and the respective change in

analytical procedure was performed.

- i. A Manual for training lab personnel was set up.

2. Non-Routine Analysis Branch

a. Work on inorganic compounds

In this respect the polarograph obtained in 1966 was used to full capacity.

Since polarographic analytical techniques depend on sample composition to a certain degree, general working procedures only were set up, leaving necessary changes to the discretion of the analyst.

The polarograph was used especially for analytical work pertaining to the Air Pollution Control Section. Samples of Dustfall and Suspended Particulate Matter were scanned for lead, copper, zinc, nickel, and cadmium. In this respect it became evident that the polarograph is not only very useful, but its performance proved excellent.

b. Work on organic compounds.

As a basic tool to separate specific organic compounds from a multi-compound mixture a high quality Gas Chromatograph was obtained in 1967. An Infra-Red Spectrophotometer for which application is made would be a basic tool for identifying separated organic compounds. Both instruments would enable the laboratory to determine the quantity and quality of specific pollutants in air and water.

This would just indicate the importance of this type of work for pollution control in future.

D — Training Course

Mr. P. Fee, Chemist, participated in a two-week training course "Chemical Analyses for Water Quality" conducted by the U. S. Federal Water Pollution Control Administration at the Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio, U.S.A.

The "Head" of the laboratory took part in a short course "Nuclear Magnetic Resonance Spectroscopy" sponsored by the Edmonton section of the Chemical Institute of Canada with the co-operation of the University of Alberta.

E — Staff

During the year, 1967, the staff increased by the addition of one industrial laboratory technician. The full staff is three chemists, including a senior chemist as "Head", four industrial laboratory technicians and one laboratory assistant.

5. PUBLIC HEALTH INSPECTION SECTION

Mr. L. E. Stewart — Chief Public Health Inspector

In 1967 there were positions for 75 public health inspectors in the Province of Alberta. During the year several vacancies occurred. Most vacancies were filled in a reasonable length of time but as the year progressed it became noticeable that there was a shortage of qualified inspectors. The Division of Environmental Health Services was able to replace Mr. J. M. Wetherill who transferred to the Division of Industrial Health Services by employing Mr. R. Horky but was not able to the year's end, to obtain a

qualified person to fill a new position created during the year. It can be anticipated that the present shortage of qualified public health inspectors will continue until such time as the new training program becomes properly established.

Three candidates were successful in the examinations for the Certificate in Public Health Inspection (Canada) written in Edmonton in November, 1967. The Division of Environmental Health Services co-operated in the holding of these examinations. Of the three who were successful, one has returned to employment outside the Province, a second is employed in health administration, while the third is now employed in the position he covered as a student.

There were no compulsory pasteurization by-laws passed during the year. Forty-two cities, towns and villages now have such by-laws in effect. Milk pasteurizing plants which had been operating in Coronation, Hanna, Eckville and Sylvan Lake closed during the year. These communities are now supplied with pasteurized milk from other plants. This continues the trend of recent years towards fewer plants and wider use of improved transportation vehicles. The number of milk pasteurizing plants has decreased from 90 in 1957 to 58 at the end of 1967.

Local Boards of Health suspended or refused five restaurant permits during the year. None of the permits suspended or refused were appealed to the Provincial Board of Health. Permits were issued or reinstated as soon as necessary measures for the protection of public health were completed. Comparative figures in recent years are: 5 in 1966, 3 in 1965, 8 in 1964, 5 in 1963 and 8 in 1962.

Provincial Public Health Inspectors were active throughout the year in programs for the protection of public health. Their activities included a program of public health inspections in areas outside cities and Health Units and some assistance in Health Units in public health inspection programs. The Public Health Inspection Section continued the Radiation Hazards Protection Program until this responsibility was transferred to the Division of Industrial Health Services in April. Other activities included the licensing of cemeteries, the licensing of commercial pesticide applicators and some inspections at food processing plants. In addition the public health inspectors continued to co-operate with other sections of the Division in activities in the field of pollution control.

A total of 491 inspections were made during the year in the basic sanitation program. Nearly all of these inspections were carried out in areas outside cities and Health Units and were of direct assistance to the local municipal authorities. The staffing of Northern Alberta Health Services towards the end of the year has greatly reduced the need for this type of inspection by placing a further large area of the Province under direct health services. Some assistance was given to Health Units in public health inspection problems. It can be anticipated that the need for this type of service will continue. Between the first of January and the end of March 47 inspections were carried out in the Radiation Hazards Control Program.

The cemetery licensing program commenced in 1965 was continued throughout the year. In this the third year of operation it was possible to trace down all but a very few of

the cemeteries not licensed in previous years. It was also possible to proceed with the task of ensuring that the land descriptions, etc. as contained in the Division's records are correct and up-to-date. The present state of licensing program will permit a greater concentration on this matter in 1968. A total of 1,225 licenses were issued for the 1967/68 licensing year. The increase is mainly attributed to the contacting of cemeteries not previously licensed. Most cemetery licenses are issued without fee. Fees paid for licenses for profit-making cemeteries, for mausolea, for crematories and for columbaria during the year amounted to \$725.00. The reduction from the amount of \$770.00 received in 1966 may be accounted by the discontinuance of one cemetery under this class.

The administration of the regulations licensing commercial pesticide applicators was again the responsibility of the Public Health Inspection Section during 1967. As this program was first inaugurated in 1966 the first full year ended on March 31, 1967, a total of 154 licenses were issued during the first license year. From April 1, 1967, to December 31, 1967, a total of 202 licenses had been issued showing a considerable increase in this area. During the year it was possible to clarify many of the problems which had occurred during the first licensing year and this resulted in an increase in the number of licenses issued.

The public health inspectors were called on several times during the year to assist the Air Pollution Control Section and the Water Pollution Control Section in their activities. This co-operation has been extremely useful as in many instances the polluting factor may be a matter of direct interest to the public health inspector.

During the year some inspections were made at food processing plants. These plants frequently supply areas which include several Health Units and do not, therefore, appear to be the responsibility of any one Health Unit. It would appear that there is a considerable area here in which there is limited public health supervision. It is felt that the Public Health Inspection Section could provide a useful service in this matter. In preparation for a more active role in the inspection of food processing plants one of the public health inspectors was attached to the New York City Health Department for a period in the fall for orientation. The training he received should be of benefit in this very important activity.

Problems connected with the location of waste disposal grounds continued. In particular these problems became acute in the City of Calgary where there was strong public opposition to proposed locations. In order that the whole matter could be enquired into, the Minister of Health established a study committee. The Chief Public Health Inspector is Secretary of the "Solid Wastes Disposal Study Committee". It is anticipated this Committee will be making its report in 1968.

The Public Health Inspectors were engaged in a diversified program in the field of public health throughout

the year. The direct inspection program was supplemented with various related activities designed to provide improved public health inspection services in the Province.

6. PLUMBING INSPECTION SECTION

The Plumbing Inspection Section of the Division of Environmental Health Services during 1967 received the sum of \$13,672.15 in the form of plumbing permit fees. The number of permits issued during the year totalled 2,211. The number of plumbing fixtures installed throughout the Province was 189,734. The value of the plumbing installed is estimated to be approximately 50 million dollars.

The number of individual types of fixtures installed was as follows:

Water closets	49,047	Lavatory basins....	48,494
Baths	32,105	Sinks	35,821
Laundry tubs	2,251	Special fixtures ..	22,016

The number of privies eliminated as a result of plumbing being installed was 407.

During 1967 this Section employed two more plumbing inspectors, making a total of seven such inspectors to cover the Province. One of the new inspectors is stationed in Edmonton while the other is located in a new Calgary Office.

This Section became responsible for plumbing inspection in the Towns of Fort Macleod, Claresholm, Taber, Elk Point and Fox Creek, as well as the Villages of Airdrie and Waskatenau. This Division is now providing inspection for 151 urban municipalities.

The Provincial Plumbing Advisory Board held one meeting during 1967 and discussed the proposed use of plastic pipe and fittings in the plumbing field. The Canadian Society of Plastics Engineers, in co-operation with the Canadian Standards Association, developed standards for the manufacture of Polyvinyl-chloride and Acrylonitrile-Butadiene-Styrene pipe and fittings. As a result of these standards the manufacturers are now producing products of an acceptable quality for the drainage, waste and vent portion of a plumbing system.

This Section is experiencing some difficulties in providing an adequate inspection service for such remote areas as Rainbow Lake and Zama, however, it is felt that many of the problems will be overcome when an all-weather road is constructed into these developments.

A committee was formed during 1967 with representatives of the Mobile Home Industry to resolve questions relating to the installation of plumbing in mobile units. The recommendations of this Committee have been forwarded to a National Committee under the sponsorship of the Canadian Standards Association and are being used as the basis for proposed standards which will govern the industry and result in uniformity of plumbing installations in trailers and mobile homes across Canada.

DIVISION OF INDUSTRIAL HEALTH SERVICES

H. Siemens, M.D., Dr. P.H., D.I.H., Director

This Division is entrusted with the surveillance of the factors in industry which may have a deleterious effect on the health of the worker. The effects of the work environment are determined by the measurements of certain parameters of health in the worker; or predicted on the basis of the concentration of noxious components in the work environment which are known to result in impaired function through excessive exposure. Thus loss of hearing acuity in noisy environments is measured by audiometry on the worker, and the presence of excessive noise levels is determined by measuring the loudness of the noise. Impaired lung function is determined by spirometry and chest X-rays; the evidence that harmful levels of noxious dusts are present in the environment is secured by means of determining the concentration of such dusts in the environment. Similar steps are taken with respect to metals, chemicals, gases and fumes which often are more immediate in their effects on the health of the worker.

During 1967, 1500 grain elevator operators were examined in such a manner. This was made possible by the active co-operation of the North-West Line Elevators Association, Alberta Division, and the member elevator companies. Assistance was also provided through a research grant from National Health and Welfare. Also included were 165 workers in flour mills, 225 in seed cleaning and treating plants, and 110 in feed mills of Alberta. The results are being evaluated and determinations of environmental factors made.

A similar investigation was made on 240 highway workers and 125 foundry workers. Lesser number were examined in gravel crushers, street sweepers, incinerator operators and others exposed to inorganic dusts of various kinds.

The results of all investigations are transmitted to management who usually take recommended steps to improve conditions or provide necessary protective devices. Local Health Agencies are taking an interest in these efforts and provide ever increasing assistance where they can, especially in audiometry.

It is not feasible to mention all the types of problems investigated by this Division. Some appreciation of their variety can be secured by examining the record of determinations made by the Industrial Hygiene section of this Division which are tabled below in Dr. Buchwald's report.

INDUSTRIAL HYGIENE SECTION

H. Buchwald, M.Sc., Ph.D., F.R.I.C., M.C.I.C.
Chief Industrial Health Chemist

In August, 1967, Mr. K. R. Schrag, P.Eng., Industrial Hygienist, left on one-year's leave of absence to undertake graduate studies in Industrial Health at the School of Public Health, University of Pittsburgh.

Mr. L. K. Smith, M.Sc., Dip. Occup. Hyg. (London)

joined our staff as Industrial Hygienist in September, 1967. In May, Dr. Buchwald attended the joint annual conferences of the American Industrial Hygiene Association and the American Conference of Governmental Industrial Hygienists. Many useful contacts were made. At the end of 1967, the staff of the Industrial Hygiene Section, including one person on leave of absence, was comprised of a supervisor, two industrial hygienists, a chemist, two technicians and a laboratory assistant.

Liaison with the City of Edmonton Engineering Department continued with respect to the construction of a dust-free operating cab for mechanical street sweepers. An improved prototype dust filtering system was constructed and tested. It is now possible to provide a dust-free working environment for the drivers of mechanical street sweepers, and all users of such vehicles in the Province will be encouraged to have their new sweepers, and possibly some of the existing ones modified in this way. The problem of excessive dust concentrations in this environment was discussed by Dr. H. Buchwald and Mr. K. R. Schrag in their paper "Dust Exposure in Mechanical Street Sweepers", American Industrial Hygiene Association Journal 28, (1967) 485-7.

Gravel crushing is an occupation associated with two major occupational hazards. Measurements at several installations, permanent and portable, have shown that operators are exposed to excessive concentrations of silica-bearing dust as well as high noise levels. Our staff have been working together with the Workmen's Compensation Board in an attempt to find a satisfactory means of protection against these hazards. The most practical solution has been to provide an air-conditioned booth for the operator. Entry of dust into the booth is prevented by keeping it under slightly positive pressure with a supply of filtered air. A number of companies have used considerable ingenuity in constructing such booths, and tests have shown that these are most efficient in protecting the occupants from both dust and noise.

Heavy equipment operators in the road construction industry are another working group exposed to excessive dust concentrations and high noise levels. Exposure to dust is intermittent and depends on weather conditions and the nature of the terrain being worked. Exposure to noise is more continuous but is dependent on the exhaust muffling provided for engines and on the provision of cabs for the operators. The continuing study on this industry has indicated that it would be extremely difficult to determine the actual exposure of any group of operators over an extended period of time. Measurements up to now have only been successful in showing that permissible limits are exceeded on numerous occasions. Provision of respiratory and ear protection for these operators appears to be necessary. A much more satisfactory solution to the problem would be the provision of dust-free air-conditioned cabs for the operators, which would also protect them from the excessive noise. In the meantime, monitoring of the

operators by lung function tests, chest X-ray photographs and hearing tests should pick out those who have been adversely affected.

Similar problems are being encountered with agricultural workers who are operating a variety of noisy and dusty machines. It is hoped that this occupational group escapes damage by the short duration of exposure. However, only tests on the exposed group will provide the necessary information.

Investigations were carried out into the exposure of thermal insulation workers to asbestos dust. These workers are highly unionized and the majority work on a contract basis at various locations throughout the Province. Measurements have shown that concentrations of airborne asbestos fibres exceed the recommended limits in a number of operations — particularly those in which asbestos sheets or mouldings are being drilled, broken or cut. In general, the results of our investigation into the working environment are comparable with those of a similar, but more extensive study recently carried out in the U.S.A. In most instances local exhaust ventilation was neglected and respiratory protection ignored. Education of these workers to the use of protective equipment, and assembling them for testing by our Chest Survey Unit is creating difficulties seldom encountered in other occupational groups.

Exposures to excessive concentrations of dust and fume have been measured in a variety of other workplaces ranging from metal foundries to municipal incinerators.

Education of management and employees to an awareness of potential occupational health hazards is a most important facet of our work. There is a steady demand for our staff to provide information and to give talks and lectures to interested groups. To meet a growing demand for more information about noise and its effects, three one-day symposia on Industrial Noise were held during 1967. These symposia, two in Edmonton and one in Calgary, were organized with the help of the Workmen's Compensation Board. The programme, which included talks on the nature, effects and suppression of noise, was directed at senior industrial management and persons responsible for health and safety. The total attendance at the three symposia was in excess of 250 persons.

An unusual occupational group exposed to excessive noise levels are instrumentalists in bands, which play the louder kind of modern music. Combinations of drums and amplified instruments can realize sound pressure levels in excess of 110 decibels. Although casual listeners are unlikely to suffer any permanent damage, the musicians may suffer permanent noise-induced hearing loss. Such hearing loss has already been reported in teenagers.

With the assistance of the Local Health Units, blood samples for carbon monoxide haemoglobin estimation were obtained from more than 390 garages and service station employees (mainly mechanics) throughout the Province. The majority of these samples were taken towards the end of the working day during sub-zero weather when ventilation is usually at a minimum. If any of the persons concerned were exposed to excessive concentrations of carbon monoxide these would be readily detected from the blood analyses. One of the most noteworthy observations

from the results obtained was the influence of cigarette smoking on the level of carbon monoxide to mask the amount of the gas which was absorbed from automotive exhaust gases. For a realistic interpretation of the results it became necessary to examine the carbon monoxide levels in a group of persons (70) not normally exposed to carbon monoxide during the course of their work. It was significant that not one person among the exposed group of 390 had more than 20% of his haemoglobin bound by carbon monoxide, and that only 24 persons had between 15 and 20% of their haemoglobin bound (21 of these persons smoked more than 10 cigarettes per day). From this study we were led to conclude that as a group, motor mechanics were exposed to only slightly higher carbon monoxide concentrations than the non-exposed group, amounting to between 20 and 50 parts per million. Exposures to high concentrations of carbon monoxide were either unlikely or only of short duration.

Following a preliminary investigation which showed that dental workers could be exposed to inorganic mercury compounds, a Federal Government Health Research Grant was obtained, to study further the source and extent of exposure. This grant will support the work of a research student for three months during the summer of 1968.

After reports of accidental poisonings by pentachlorophenol in another province, our staff examined the manufacture and large scale use of this compound as a wood preservative. Analyses of urine specimens from persons exposed and of the atmosphere in the workplaces has been carried out. No adverse reaction to pentachlorophenol has yet been reported in this Province.

The laboratory took part in an inter-laboratory trial of blood lead analyses organized by the American Industrial Hygiene Association. Some 70 laboratories in the U.S.A. and Canada participated in the trial. The results are not yet available at the time of writing.

A classical case of intoxication by mercury vapour was investigated. Mercury metal was being handled in a ½-ton van used as a mobile testing laboratory. The person affected worked inside the enclosed and poorly ventilated van body; mercury vapour was generated from the numerous droplets of mercury spilled inside the van. Some of the mercury was evidently volatilised by dropping on the interior heater, or from the heat of a lighted cigarette placed on the workbench. The symptoms of intoxication soon subsided after the person concerned was removed from exposure; even though the mercury was detectable in the urine for many months afterwards.

Our staff participated in a week-long survey of health and safety practices at the Northern and Southern Alberta Institutes of Technology. Miss I. Courtenay, Nurse Consultant and Mr. J. P. Windish, Industrial Hygienist, both of the Federal Division of Occupational Health, Ottawa, led the surveys.

INVESTIGATIONS CARRIED OUT AND MEETINGS ATTENDED	
Plants and other locations visited to carry out tests for atmospheric contaminants	61
Noise surveys	22
Meetings and discussions where the technical knowledge of the staff was required	75
Site visits and inspections at which tests were not required	62
Committee meetings attended	14
Talks and lectures given	18
Total	252

TESTS CARRIED OUT AT THE SITE AND IN THE
LABORATORY

Air samples for gases, vapours and fumes	93
(Included: carbon monoxide, carbon dioxide, cresols, hydrocarbon vapours, hydrogen chloride, hydrogen cyanide, hydrogen sulphide, lead fume, mercury vapour, nitrogen oxides, oxygen, ozone, perchloroethylene, pentachlorophenol and uranium)	
Air samples for dust count	272
Settled dust samples	41
(Include analyses for heavy metals, silica, etc.)	
Blood specimens analysed	390
(Included: carboxyhaemoglobin	383
lead	7
Urine specimens analysed	260
(Included: lead and coproporphyrin	226
copper	6
pentachlorophenol	24
mercury	4
(All urine specimens received are routinely tested for specific gravity, glucose, ketones, occult blood, protein and pH)	
Miscellaneous specimens	8
(Included: steel, solvents, uranium ore, unknown organic matter)	
Total tests carried out and samples examined	<u>1,064</u>

RADIATION HEALTH SECTION

Mr. J. M. Wetherill, Radiation Health Officer

At the beginning of July 1967, the control of hazards from ionizing radiation was transferred to this Division from the Division of Environmental Health Services. This includes the responsibilities in connection with the local application and enforcement of the Atomic Energy Control Regulations.

Duties involve those of "Inspector Officer", as designated by the above mentioned regulations and include inspection and approval of devices incorporating radioactive sources and the investigation of accidents and losses involving such materials.

The position functions as liaison between local users of radioisotopes and the Atomic Energy Control Board (licensing authority) and the Radiation Protection Division (health advisors to the licensing authority), both of which are located in Ottawa.

There are approximately 110 licensed users of radioisotopes in the province where the substances are utilized in industry, research and medicine. This includes 11 new users in 1967.

A total of 93 field inspections were made during the second half of the year as part of this programme, of a total of 140 visits. The remainder included the investigation of accidents relating to radiation, attendance at meetings and the presentation of lectures on radiation hazards control. These latter were given to industrial safety meetings, Emergency Measures Organization trainees, classes at the Northern Alberta Institute of Technology and the national conference of the Canadian Society of Radiological Technicians.

At the end of 1965 the Minister of Health held a meeting to consider the possibility of setting up a programme to control radiation hazards associated with the use of X-ray equipment. This resulted in the formation of a provincial Radiological Health Advisory Committee in 1967. Membership of this committee includes the Director of the Division; Dr. H. E. Duggan, Director of the Radiology Department, Foothills Hospital, Calgary (also a member of the National X-ray Safety Committee); and Dr. S. R. Usiskin, Chief Medical Physicist, Edmonton Cancer Clinic.

Under the general guidance of this committee, and in accordance with the recommendations of the National X-ray Safety Committee, the Division has established a programme to check all types of X-ray equipment in the Province.

Registration of installations is in progress and a service to check and monitor equipment is being made available on request. It is estimated that there are some 1200 X-ray devices in use in the Province and it is hoped that all will eventually be checked. Surveying of installations has commenced and the defects noted so far have justified the establishment of the service.

CIVIL SERVICE NURSING BRANCH

K. E. Jorgensen, R.N.

This Branch offers assistance to the Civil Servants, at and through their places of work. It is a service for the employee in phases of physical or mental ill-health.

Due to the extensive and prolonged renovation procedures in the Administration Building and the adjoining Natural Resources Building, the staff in the immediate area have been lessened by hundreds. Due to this fact our office calls have diminished approximately 16% this year in comparison to our 1966 records. Regardless of this, the demand for supplies became greater as "sick rooms" increased.

Three first-aid rooms were established in the Agriculture Building this year which accommodates the staff of the Department of Mines and Minerals and the Department of Agriculture. The Department of Industries and Development moved to the Centennial Building which necessitated first-aid equipment and medical supplies.

The Museum and Archives Building, which was officially opened in November, has a small but well-equipped "emergency" room. The Department of the Provincial Secretary financed the cost of the wheel chair, stretcher and a few miscellaneous items. We supplied the initial drugs, dressings, basins, instruments (scissors etc.) and bed linen. Mr. Cain who is in charge, was a former instructor in the St. John Ambulance Association and also had training in the Army Medical Corps. Two members of the staff are trained St. John Ambulance men. This gives a continuous service for emergency cases.

During the first part of the year the Department of Labor requisitioned for a first-aid kit for their testing laboratory. This request was fulfilled.

As in previous years, the "problem drinker" gives great thought and concern to management. We have encountered

a few of these cases this year. A recent Order-in-Council regarding this type of illness, has proven, we believe, to be a step in the right direction. Now when management discovers an employee as a "problem drinker" and the patient agrees to undergo treatment, his absence is accepted as "sick leave". If the patient is reluctant, it constitutes termination of his service. Previously these cases were a constant source of procrastination and broken promises. The ultimate results of the new "order" appear encouraging.

Many cases of the so-called 'flu have been more severe than usual and more patients have suffered relapses. Unlike other years, several cases of tracheitis have developed.

Our appreciation is expressed to Dr. J. D. Ross, Minister of Health, and his staff who so willingly assist us in our health and administration problems. We also extend our gratitude to the staff who regularly assist in the various "emergency rooms".

The following is a résumé of the year's work.

Month	Office Calls	Home Calls	Compensation	Certificates
January	404	76	1	48
February	369	60	6	28
March	404	36	5	21
April	419	32	4	13
May	454	57	8	21
June	403	35	5	17
July	410	38	3	14
August	409	46	12	22
September	378	50	5	28
October	381	50	6	28
November	360	43	16	30
December	330	49	6	11
1967	4721	572	77	281
1966	5637	624	98	463

DIVISION OF ALCOHOLISM

J. P. Matheson, B.A., B.S.W., C.A.S.W., Director

Division of Alcoholism activities expanded dramatically and took on new dimensions in 1967. Treatment techniques have been improved, refined and applied more efficiently to cope with an unprecedented demand for these services, but the main focus of the year's work has been on the teaching and training responsibilities of the Division staff and facilities.

An excellent start was made in the development of community alcoholism programs in smaller urban centres which do not have the services of Division clinics. Community Services staff has concentrated considerable effort in establishing these community programs through contacts with health units, welfare officers, clergymen and other community workers.

Training and orientation courses designed for those involved in a professional way with the problem of alcoholism, as well as community alcoholism workers, have been introduced and are achieving encouraging results.

A key facility for both treatment and education, "Henwood", the new residential rehabilitation unit north-east of Edmonton, was turned over to the Division of Alcoholism during the year and is gradually being phased into full operation. This new in-patient centre will provide facilities for special training courses for medical students, social workers, clergymen and others interested in localized alcoholism programs.

The Division of Alcoholism has been involved in the development of improved institutional alcoholism programs in the province, particularly at Alberta Hospital (Oliver) and Belmont Rehabilitation Centre. Arrangements for pre-release counselling by Division personnel at both institutions has improved the effectiveness of the "follow-through" program of social services to assist patients in achieving complete reintegration to a useful role in society.

Alberta universities in Edmonton and Calgary have offered non-credit courses in alcoholism through their extension departments which attracted almost 100 registrants during the year. Benefits from these courses, which drew on Division of Alcoholism staff for faculty, will be reflected in greater co-operation and understanding among agencies and individuals interested in the problem of alcoholism in Alberta's major centres as well as surrounding communities.

In the field of industrial programming, a new training course for supervisors has been perfected to facilitate the early and efficient functioning of company alcoholism policies. The pamphlet, "A Guide for Supervisors", was designed and produced as a training tool and reference for those taking the course.

An alcoholism policy for public service employees was instituted by the Alberta government during the year and the Division staff is prepared to begin a comprehensive training program for supervisors in 1968.

Increasing public pressure for information concerning the use and abuse of drugs, particularly those known as the "psychedelic drugs" such as marijuana and LSD, has been

met to a limited extent by the Division of Alcoholism. A number of new films and filmstrips dealing with the subject have been purchased and a number of publications added to the shelves of our lending library. These materials have been used extensively in 1967 by schools, church groups, public health nurses, and representatives of the Food and Drug Directorate of the Department of National Health and Welfare as background information for lectures and discussions.

Several new pamphlets for addition to the Division's growing literature portfolio were under production at the end of the year. An improved program for the distribution of literature is channelling supplies of Division information materials into welfare offices, health units and hospitals on a regular basis.

A diligent search for new audio-visual material resulted in the purchase of about a dozen new films and filmstrips useful both in public information and in group therapy sessions for patients.

Eight issues of the Division's publication "Concept" were produced and distributed during 1967 to more than 7,500 Albertans in the helping professions. It has proved to be an effective information tool which has covered every aspect of activities in the field of alcoholism in the province.

Newspapers, radio and television stations have been generous in their support of the work of the Division of Alcoholism during 1967 with a number of excellent feature articles and programs.

The enthusiastic assistance and guidance of the Advisory Council to the Division of Alcoholism has been an important factor in the growth and expansion of activity and the new approach to the problem of alcoholism during 1967.

EDMONTON CENTRE

With 825 new patients registered at the Edmonton Alcoholism Clinic, 1967 was the busiest year on record. This was an increase of 133% over the 1966 registration of 353 new patients. Edmonton magistrates court pilot project to deal with offences under the Alberta Liquor Control Act contributed greatly to this increased case load.

Pressures of the court project plus the training of new staff for Henwood Rehabilitation Unit created problems of both space and time for the clinic staff. Recreational therapy was introduced for the first time with the employment of a full-time therapist. This proved to be a very successful project which was continued for some months by the Henwood staff following the resignation of the therapist and pending the appointment of a replacement.

Space problems and a shortage in counselling staff resulted in greater emphasis on group work with patients with corresponding reduction in individual counselling. This

new approach has been an effective method of coping with the rising demand for services.

Property immediately south of the clinic building was purchased early in 1967 but renovations were delayed for some months and it was impossible to make use of the extra space.

The Community Services program has been expanded to several new areas during 1967 and staff has been involved in the continuing alcoholism courses offered by the University of Alberta. Training courses and general orientation of nursing students and nursing aides have been maintained.

Liaison with the schools and with public and separate school boards has been good. In June a crash program of alcoholism education for Grade 10 students at Jasper Place Composite High School was conducted on invitation from guidance teachers. As a result of this experience and a change in Division policy, a two-fold approach to meet the needs of teachers and schools was drafted and presented to both Edmonton school boards. The proposal offered: 1) audio-visual aids and literature for reference to be supplied to the boards' I.M.C. libraries; and, 2) assistance from Division staff as resource persons for school teaching staff or individual teachers but not on the basis of instructors in classrooms.

A two-day session with community development officers proved very fruitful as did several other similar seminars with social service agency staffs and Indian community health workers.

CALGARY CENTRE

Increase in demand for services at the Calgary Alcoholism Clinic was not as dramatic as that in Edmonton but did rise 17% in 1967. Day centre activities were begun early in the year and recreational therapy was also provided for patients. Expansion of treatment services was made possible by the transfer of Community Services to a new location in the Sherman Oakes building nearby.

In addition to the usual orientation program for nursing students who visit the clinic each week a new program for graduate medical students specializing in a post graduate course in Family Medicine at the Calgary General hospital was instituted. Medical students from this course spend two days each month at the Calgary Clinic.

Police training has been a major activity of Community Services staff in Calgary with recruit training courses held regularly at Penhold for the R.C.M.P. Similar courses were held in Calgary for city police and the armed forces Provost Corps, as well as for police and probation officers in Lethbridge and Medicine Hat. At Drumheller a training course was initiated for staff at the new penitentiary.

In co-operation with the University of Calgary two alcoholism institutes or training courses were offered at the university during the year. A seminar for personnel managers was also held in October with good representation from many of the larger industrial firms.

RED DEER CENTRE

Highlight of the year's activities at the Red Deer clinic was the promotion and joint sponsorship of a seminar for clergymen at Drumheller in December. Aimed specifically at clergymen serving smaller urban and rural centres in Central Alberta, the two-day alcoholism seminar attracted an excellent registration and sparked considerably increased interest and understanding of alcoholism among clergymen of all denominations.

The addition of a new counsellor to treatment staff freed the supervisor for more activity in Community Services programs and co-operation in developing industrial policies for industrial plants in the Stettler, Rimbey and Rocky Mountain House areas.

Division of Alcoholism staff enjoys an excellent working rapport with family court and other social service agencies in Red Deer. Relations with the press, radio and television has been maintained on a good level of understanding.

RESEARCH SERVICES

Research Services has become an effective source of direction and program evaluation for the Division of Alcoholism.

The past year has seen the development of a vigorous program of practical, applied research. During 1967 efforts have been concentrated on a thorough evaluation of the first year of operation of the Magistrate's Court for the Alcoholic Offender in Edmonton, and in collaboration with Community Services staff, on training techniques for the Division's supervisory training program.

A study of alcoholic patients in Calgary hospitals was completed and another research enterprise nearing completion is a statistical study of the prevalence of alcoholism in Alberta. Revised techniques for patient assessment and follow-up, with particular emphasis on occupational assessment, are in the process of development. Evaluational instruments for use in orientation and training programs have been devised.

Extramural research has likewise seen extensive development. Experimental studies comparing the sensory modalities of alcoholics and non-alcoholics are being conducted by Dr. T. M. Nelson and Dr. P. Swartz, part-time research consultants from the University of Alberta. Dr. J. A. L. Gilbert has furthered his comparative studies in alcohol metabolism with different ethnic groups.

A new dimension to the research program was added with the acquisition of a trained research librarian. The research library is undergoing major re-organization and will increasingly become an invaluable resource for staff, professionals in the community, students, and others.

Following are comparative statistics on case loads, interviews and group therapy activities at the three clinics operated by the Division of Alcoholism:

NEW PATIENTS - 1967	MALE	FEMALE	TOTAL
All centres combined	1,029	113	1,142
Edmonton	754	71	825
Calgary	240	37	277
Red Deer	35	5	40

COUNSELLING INTERVIEWS - 1967	INDIVIDUAL			JOINT			FAMILY		
	Patients	Relatives & Others	Total	Patients	Relatives & Others	Total	Patients	Relatives & Others	Total
All Centres combined	7,458	2,078	9,536	57	8	65	319	3	322
Edmonton	3,864	1,199	5,063	20	-	20	168	-	168
Calgary	3,217	703	3,920	14	4	18	147	2	149
Red Deer	377	176	553	23	4	27	4	1	5

MEDICAL INTERVIEWS - 1967	DOCTOR/PATIENT			NURSE/PATIENT		
	Patients	Relatives & Others	Total	Patients	Relatives & Other	Total
All centres combined	397	-	397	6,701	-	6,701
Edmonton	133	-	133	4,142	-	4,142
Calgary	264	-	264	2,559	-	2,559

GROUP THERAPY - 1967	INDIVIDUAL PARTICIPANTS			SESSIONS
	Patients	Relatives & Others	Total	Total No.
All centres combined	2,198	780	2,978	873
Edmonton	1,682	461	2,143	621
Calgary	496	312	808	239
Red Deer	20	7	27	13

DIVISION OF ARTHRITIS SERVICES

R. K. Thomson, B.Sc., M.D., F.R.C.P. (C), F.A.C.P., Director

The Division of Arthritis continues to accept patients under the age of 25 years, who are suffering from or suspected to be suffering from Rheumatoid Arthritis, upon referral by the patient's personal physician. Clinics are maintained at 511 Medical Arts Building, Edmonton, and at 2104-2nd Street S.W., Calgary, for the purpose of investigation, diagnosis and recommendations regarding treatment. The patient is returned as quickly as possible to his physician with a detailed report covering the clinic visit. Hospitalization, medical care, corrective surgery, laboratory and X-ray examinations, physiotherapy and appliances, and the drugs used in the treatment of Rheumatoid Arthritis, are all provided without charge to the patient.

There has been an increase in the number of patients returning for repeat examinations and advice. In September when the Edmonton clinic was moved to its present location, a letter was sent to all doctors who had referred patients to us. Letters were also sent to all Juvenile Rheumatoid Arthritis patients on the clinic register, informing them of the change of address and asking to hear from either the patient or his doctor. The response was dramatic. We received replies not only from our active cases but from a large number of cases we had not seen for some time. It is an interesting fact that since the month of our move, the activity in the clinic has quadrupled.

There is no essential change in the number of new cases seen. It is possible that a number of new cases of Rheumatoid Arthritis may be seen by the consulting pediatricians in the province, but it is our impression that the majority are referred for consideration by the clinic. The range of age at onset remains the same, but we are impressed by the number of very young children who show up with Rheumatoid Arthritis.

The greatest value of the clinics has been in the education of patients through consultation with their doctors regarding the best method of treating and living with Rheumatoid Arthritis. It is recognized that, where an early diagnosis can be made, some of the deformities of this disease may be prevented or limited. And it is equally true that when some of the financial burden, such as might be caused by expensive drugs, is lifted, earlier help may be sought by the patient.

STATISTICAL COMPILATION—1967

ACTIVE CASES:	Edmonton	Calgary	Total
Admissions	16	4	20
Readmissions after 5-year remission	13	1	14
Repeat examinations made	133*	20	153
Rheumatoid Arthritis cases—NEW	14	4	18
Total Rheumatoid Arthritis cases under treatment	146	54	200
*In addition to this figure, another 25 cases, although not seen in 1967, have corresponded with the clinic regarding care.			
INACTIVE CASES:			
Rheumatoid Arthritis cases formerly under treatment in the clinics, now ineligible (over 25 years of age)	261	119	380*
Cases referred as suspect Rheumatoid Arthritis, diagnosed as Rheumatic Fever	8	8	16
Cases referred as suspect Rheumatoid Arthritis, diagnosed as "other" illness....	14	13	27
*Although ineligible, many of these still look to the clinic for supportive interest and advice.			
TREATMENTS—January 1st to December 31st, 1967			
Hospital Days	1315	305	1620
Clinic and office visits	176	25	201
Physiotherapy treatments	398	—	398
Other:—including surgical, injections and special procedures	128	40	168
TOTAL TREATMENTS	2017	370	2387

ALBERTA HEALTH PLAN DIVISION

J. A. D. Paul, M.D., C.M., Director

By authority of the Alberta Health Plan Act assented to April 11th, 1967, the Alberta Health Plan commenced July 1st, 1967.

Section 3 of the Act indicates as follows:

"The purposes of the Alberta Health Plan are to afford to all residents of Alberta, regardless of income level, the opportunity to obtain for themselves and their dependants basic health services and optional health services under a voluntary plan to provide prepaid or insurance coverage for those services and to provide financial assistance to residents in low income groups, where required and requested, by way of subsidies paid by public moneys of the Province."

Basic Health Services were defined as:

- (i) medical services provided by a physician,
- (ii) oral surgery provided by a dental surgeon,
- (iii) services provided by an optometrist in respect of the refraction of the eyes for the fitting of glasses,
- (iv) services and appliances provided by a podiatrist, and
- (v) services provided by an osteopathic practitioner, subject to the limitations and exclusions prescribed in the regulations. This established a minimum level of health insurance coverage to be offered by the Government agency and approved carriers throughout the Province.

Optional Health Services offered under a standard contract by the Alberta Health Plan and which can be purchased only as an addition to Basic Health Services, are divided into three categories:

- A. Hospital & Ambulance Services
- B. Drugs & Prosthetic Appliances
- C. Chiropractic & Naturopathy

Subsidies are available at the following taxable income levels:

Subsidy Level 1

No taxable income —

Applicable to Single or Family Contract.

Subsidy Level 2

Taxable income not exceeding \$ 500.00 —

Applicable to Single Contract only.

Taxable income not exceeding \$1000.00 —

Applicable to Family Contract only.

Social Service Recipients as authorized by the Department of Public Welfare are provided with coverage for Basic Health Services and certain Optional Health Services free of charge.

Persons who do not qualify for subsidy are required to pay the regular subscription rates.

For the period July 1st to December 31st, 1967, an amount of \$10,847,640.00 was collected for premiums. Of this amount, \$3,026,492.00 was paid by subscribers and \$7,821,148.00 paid by the Government in the form of subsidies to Social Service Recipients and low income groups as noted above. The amount paid for claims for all services during the period was \$12,097,760.00. The average number of contracts during the period was 150,277 covering 359,500 lives.

DIVISION OF TUBERCULOSIS CONTROL

H. H. Stephens, M.D., Director

The number of new active cases of tuberculosis discovered in this province during each of the past five years would suggest that we are on a plateau with slight upward and downward fluctuations. 1967 was a year showing an upward swing and these changes are noted in the following tables:

	1963	1964	1965	1966	1967
Total newly discovered cases	854	763	713	665	745
Of the above: Active	343	317	347	310	336
Inactive	511	446	366	355	409

The active cases are noted in the following groups:

	1963	1964	1965	1966	1967
1. Registered Indians	57	45	66	47	75
2. Metis	68	68	56	70	30
3. Others	218	204	225	193	231

PER 100,000 POPULATION

	1960	1965	1966	1967
New active case rate—Alberta	39.4	24.6	20.7	22.4
New active case rate—Registered Indians	485	287	188	256
New active case rate—Metis	418	224	280	120

The four areas in the province having a new active case rate higher than the provincial average in 1966 were given special attention in 1967. The Mobile X-ray Unit screened in each area, and in each instance fewer cases were discovered than in the previous year.

In 1967 there are nine such areas with a new active case rate higher than the 1967 provincial rate of 22.4 per 100,000.

It would appear in many instances that a small number of open infectious persons are responsible for spreading tuberculosis to a few relatives and associates over a period of some weeks or months before being detected. Public education is necessary to encourage awareness of possible tuberculosis, which can be detected early by tuberculin testing and investigation of reactors. This testing is also a simple and inexpensive method of early case detection in hospitals and medical offices. Physicians and hospital administrators are being asked to take a more vigorous approach, not only to rule out the possibility of active tuberculosis, but as a means to protect hospital personnel from unnecessary exposure to this disease.

Construction

There was no new construction in 1967 at either the Baker Memorial Sanatorium or the Aberhart Memorial Sanatorium.

There were renovations and adjustments made at Baker Memorial Sanatorium to adapt the facilities of two buildings in order to accommodate in them all cases of tuberculosis under treatment. The total bed complement being thus reduced to 84.

Two of the buildings on the south side have been vacated and will be the first to be demolished when new construction is initiated.

The series of three north buildings has been assigned to the Department of Mental Health. Two sections each accommodate 60 cot cases, mentally retarded and severely handicapped children. The centre section is adapted to care

for physically handicapped wheel chair cases who are mentally retarded, and has 32 beds.

The Aberhart Memorial Sanatorium, since opening in 1952 with 295 beds, has recovered a sun room for dining and play which was used as a ward. The elementary school room has been placed in a medium sized ward, while the teacher of high school and commercial subjects has a smaller one. The Physiotherapy Department and Occupational Therapy Department are active with patients being more ambulant, and larger wards were needed to provide facilities to meet these needs. The present bed complement is 267.

Diagnostic Services

The family doctor in 1967 referred 41% of all new active cases to our attention.

The medical and nursing staff of Health Units and Boards of Health have given extra effort and support in the follow-up of ex-sanatorium patients, known inactive cases, contacts and suspects from previous surveys or clinics. They also screen school children and personnel by tuberculin testing and arranging chest X-rays of reactors. Approximately 102,000 children were tested, by interval grades a few years apart, and 14 new cases were discovered, 4 being active.

The out-patient clinic at each Sanatorium, as well as 14 other clinics located in key centres, provided service to over 22,000 persons, either examined, X-rayed or both.

Mass X-ray Surveys using two Mobile X-ray Units, purchased by the Alberta Tuberculosis Association and operated by the Department of Health, Tuberculosis Division, as well as the Alberta Tuberculosis Association Miniature X-ray Units in City Halls in the major cities, or in Health Unit Offices in smaller cities and X-ray units provided by the Attorney General's Department in Correctional Institutions, screened over 100,000 persons. There were 26 new active or probably active cases of tuberculosis discovered as well as 22 cases of suspect new growth.

All clinics and surveys in the province gave service to 286,951 persons in 1967.

Treatment Services

The number of patients treated during 1967 was 808 in the two provincial Sanatoria compared with 810 in 1966.

Since February 1967 all new active cases of tuberculosis among Registered Indians in the province have been treated in the provincial Sanatoria. The Baker Memorial Sanatorium had those resident in the south half of the province admitted there during the past few years.

The average stay in hospital is unchanged from 1966 being about 5.6 months.

There were 301 patients discharged to continue therapy at home under out-patient clinic supervision to complete in most cases a total of 18-24 months treatment.

The need for major surgical intervention has shown some decline.

Prevention

B.C.G. vaccination is offered to 14-year-old Metis children who are non-reactors to tuberculin in the schools within Northern Health Unit areas where this higher than average risk group reside.

The Medical Services, Department of National Health and Welfare offers B.C.G. vaccination to all non-reactors to tuberculin under age 25 among the Registered Indians in the province.

A prophylactic chemotherapy program is being developed for known converters to tuberculin, reactors among school children, and grossly exposed adults, plus other selected categories, whose reactions are over 10 mm. in diameter to the standard 5 T.U. test dose of tuberculin, using the Mantoux method.

Education and Rehabilitation

Qualified teachers continue the regular academic training of children Grades I to IX, and correspondence school branch courses are obtained for senior grades. The latter are supervised by a teacher provided by the Alberta Tuberculosis Association at both provincial Sanatoria. A part-time teacher fills the requirements at the Baker Memorial Sanatorium up to Grade IX.

The Alberta Tuberculosis Association also provides a rehabilitation officer at each Sanatorium, and commercial subjects are taught to over school age persons interested in taking special subjects.

Occupational therapy augments both the medical treatment and academic program in hospital life, and is more active with patients being more ambulant while undergoing hospital treatment.

The physiotherapy that patients receive pre and post-operatively, assists in shortening convalescence for surgical cases, while many medical conditions receive necessary attention, especially in the respiratory field.

Nursing and Medical Program

A two-week nursing affiliation program has continued a course being given once every four weeks with the University Hospital Training School, Edmonton.

The fourth year medical students have a two-hour clinical session at the Aberhart Sanatorium each week throughout the academic year.

A special three-day orientation and refresher course for Public Health Nurses combined with the Affiliate Nurses program has been given throughout the year. This has been of value in co-ordinating hospital therapy with earlier out-patient care and supervision, as well as clarifying problems in the follow-up program. Nurses attending have had expenses defrayed by the Alberta Tuberculosis Association,

and this assistance has been much appreciated.

Acknowledgements

I wish to thank the Minister, the Honorable Dr. J. Donovan Ross, and the Deputy Minister, Dr. P. B. Rose, for their interest and support concerning the work of this Division.

The X-ray survey of Registered Indians and any resident provincial cases living adjacent to Reserves in the province has been carried out by the staff of Medical Services, Department of National Health and Welfare, and their efforts and assistance is gratefully acknowledged.

The Alberta Tuberculosis Association whose interest continues in early case detection, public and professional education and rehabilitation in the Sanatoria, has contributed a great deal to the Division Program in these areas.

Kinsmen Nurses in the major cities have assisted materially in our follow-up program.

The organizers of Mobile X-ray Surveys, have worked hard this year to improve attendance at clinics. The Stationary Miniature X-ray Unit staffs have co-operated in supplying necessary information for our records.

The staff in the Alberta Tuberculosis Association office have kept essential information, pamphlets, films for educational purposes, available to this Division as required. To all staff of the Association, Mr. McKenzie, his Board of Directors, and members of the Medical Advisory Board I wish to express my appreciation for the attention and assistance given in the work of this Division.

To the several organizations, church groups, service clubs, volunteer helpers throughout the province, and many individuals who have given freely of their time to assist patients or other phases of activity of this Division, I wish to express our appreciation for this generous help.

The patients at each Sanatoria are most grateful to the clergy who attend to their spiritual needs during their stay in hospital, and staff are appreciative of this service.

The control centre for tuberculosis is the Central Registry, and to those in this Department and at the Data Centre who have co-ordinated and worked together in this program, I wish to express my appreciation for their efforts.

In each Sanatorium the work to provide adequate patient care goes on in many departments. To Dr. Ryder and his staff, Baker Memorial Sanatorium, Calgary, and to Department Heads and personnel in each department at the Aberhart Memorial Sanatorium I wish to acknowledge their efforts and attention in providing this service throughout the year.

A Statistical Summary follows, outlining the work carried out by the Division.

SCHOOL TUBERCULIN TESTING SURVEY

Health Unit, City or Municipal Nursing District	No. Tested		No. Reactors		Total Reactors	Number X-rayed	New Cases Tub.	
	School	Staff	Contacts	School	Staff	Contacts	Act.	Inact.
Alberta East Central H. U.	3,706	423	-	64	75	-	-	-
Athabasca H. U.	2,266	135	74	378 (318)	26 (4)	14	-	-
Banff National Park H. U.	150	14	-	-	-	-	-	-
Barons-Eureka H. U.	1,091	418	11	4	20	2	26	25
Big Country H. U.	908	123	12	3	5	3	11	-
City of Calgary	14,129	2,386	592	254 (60)	163	131	548 (60)	-
Chief Mountain H. U.	420	165	-	15	28	-	43	-
Chinook H. U.	1,347	75	4	18	11	1	30	-
Drumheller H. U.	659	156	1	16	14	1	31	-
City of Edmonton	28,247	4,661	6,015	1,251	296	486	2,033	3
Edson H. U.	1,402	223	61	31	44	17	92	1
Foothills H. U.	1,642	219	26	15	35	6	56	-
Fort Assiniboine District Nurse	197	9	22	15	-	2	17	-
Fort Chipewyan District Nurse	151	-	4	97	-	1	98	-
Fort McMurray District Nurse	84	26	-	34	8	-	42	-
Grande Prairie H. U.	3,633	527	84	76	44	11	131	1
Jasper National Park H. U.	203	14	5	2	-	-	2	-
Leduc-Strathcona H. U.	3,632	565	51	32	36	1	69	-
Lethbridge H. U.	2,353	342	112	28	21	23	72	-
LaCrete District Nurse	152	23	-	-	3	-	3	-
Medicine Hat H. U.	2,712	660	56	32	30	5	67	-
Minburn-Vermilion H. U.	2,907	442	291	107	60	58	225	-
Mount View H. U.	1,957	208	97	46	10	23	79	-
North Eastern Alberta H. U.	5,724	640	250	204 (40)	25 (3)	49	278 (43)	3
Peace River H. U.	2,384	132	86	92	20	9	121	-
Red Deer H. U.	5,891	525	395	176 (17)	69	48 (34)	293 (51)	-
Stony Plain-Lac Ste. Anne H. U.	612	90	37	6	4	6 (1)	16 (1)	-
Sturgeon H. U.	5,488	628	146	87	62	12	161	-
Vegreville H. U.	2,775	92	50	42	11	14	67	-
County of Warner H. U.	736	97	11	6	6	-	12	-
Wetoka H. U.	3,504	410	169	47	15 (1)	14 (2)	76 (3)	1
High Level District Nurse	626	22	-	98	9	-	107	-
TOTAL	101,688	14,450	8,662	3,276 (435)	1,150 (8)	937 (37)	5,363 (480)	10
							6,848	

Figure in brackets indicates number of reactors previously given B. C. G.

DEPARTMENT OF HEALTH

3.

MASS X-RAY SURVEYS

Number X-rayed

Surveys at 121 points in 8 Health Units, 3 Municipal Nursing Districts.

Calgary and Edmonton	69,521
City Hall, Calgary	11,096
City Hall, Edmonton	9,378
City Hall, Lethbridge	1,539
Health Unit Office, Medicine Hat	850
Health Unit Office, Red Deer	895
Municipal Hospital, Athabasca	65
Correctional Institutions—	
Calgary	2,611
Fort Saskatchewan	3,519
Lethbridge	567
X-ray Unit #6, North	239
Northern Alberta Institute of Technology, Edmonton	143
Portable X-ray (Private)	119

GRAND TOTAL	100,542
-------------------	---------

SUMMARY MASS X-RAY SURVEYS

Number X-rayed	100,542	
Probable Tuberculosis, Active	21	(15 previously recorded)
Probable Tuberculosis, Inactive	1,321	(1,192 previously recorded)
Pleurisy, Active	—	
Pleurisy, Inactive	491	(200 previously recorded)
Further Examination Requested	639	
Non-Tuberculous Chest Conditions:		
(a) Suspect new growth	14	
(b) Other	609	
Undiagnosed (includes 716 spoiled films and 5 x-rays of Registered Indians sent to Medical Services, Dept. of National Health and Welfare for interpretation)	726	
No Disease	96,721	
Of the *549 persons requested to have further examination, 310 are known to have been checked and diagnosed as follows:		
Tuberculosis, Active or Probably Active	20	
Tuberculosis, Inactive	45	
Pleurisy, Inactive	9	
Further Examination Requested	29	
Non-Tuberculous Disease	58	
Suspect Carcinoma	8	
No Disease	141	
	310	

The other 239 have either moved from Alberta, cannot be located or are still on our Follow-up Lists.

*The other 90 cases requiring further examination were x-rayed at the Correctional Institutions and as the majority of these are transient and therefore most difficult to locate they are not included in this table.

4.

SUMMARY CLINICS AND SURVEYS

Number Checked

Stationary Clinics	11,570
Miscellaneous Clinics	11,087
Mass Surveys	100,542
Other Surveys (Tuberculin Testing Only)	129,331
Department of National Health and Welfare (Registered Indians, Whites and Metis)	18,982
Hospital Admission Program	8,692
Mental Hospital	6,747
TOTAL	286,951

The Hospital Admission X-ray Program, sponsored by the Alberta Tuberculosis Association in various hospitals throughout the Province, reports chest films taken as follows:

14 x 17 films	3,690
Miniature films	6,304
Total	9,994

Of the above, only those referred to the Sanatorium for interpretation are included in Table 4.

5. SOURCE OF DISCOVERY OF NEW CASES OF TUBERCULOSIS					
	1966	%	1967	%	% (Active)
Clinics	422(115)	63.4	449(127)	60.3	37.7
Referred for admission:					
(a) Family Doctors	129(122)	19.3	105(98)	14.1	29.2
(b) District Nurses	—	—	1(1)	.1	.3
(c) Contact Reactors	—	—	3(3)	.4	.9
#6 X-ray Unit	3(—)	.5	—(—)	—	—
Referred by Department of National Health and Welfare:					
(a) D.V.A. or National Defence	5(1)	.8	3(—)	.4	—
(b) Other (including Registered Indians)	57(49)	8.6	82(69)	11	20.5
Provincial and Hospital Laboratories	7(6)	1.1	9(9)	1.2	2.7
Hospital Admission Program	8(—)	1.2	9(1)	1.2	.3
Mental Hospital	12(5)	1.8	35(9)	4.7	2.7
Information from Private Physician	—(—)	—	24(8)	3.2	2.4
Miscellaneous	22(12)	3.3	25(11)	3.4	3.3
TOTAL	665(310)		745(336)		

Figure in brackets indicates number of active cases included in preceding figure.

The following table sets forth the sources of discovery giving credit to the programs which actually instigated the investigation for tuberculosis. For instance, cases x-rayed on Mass Surveys, whose films show probable tuberculosis, are referred to the Tuberculosis Clinic or for admission to confirm the diagnosis. "Clinic" is not listed as a source in this table and the 449 cases credited to that source in the preceding table are distributed among the various sources listed below.

	1966	%	1967	%	% (Active)
Family Doctor	254(172)	38.2	221(140)	29.7	41.7
Mobile Unit	89(11)	13.4	83(15)	11.1	4.5
#6 X-ray Unit	4(—)	.6	—(—)	—	—
Contacts	48(33)	7.2	52(45)	7	13.4
Department of National Health and Welfare:					
(a) D.V.A. or National Defence	5(1)	.7	4(—)	.5	—
(b) Indian Health Services	57(50)	8.6	85(70)	11.4	20.8
(c) Immigrants	64(4)	9.6	82(5)	11	1.5
Previously diagnosed other Provinces or Countries	58(7)	8.7	75(11)	10.1	3.3
Hospital Admission Program	12(—)	1.8	13(1)	1.7	.3
School Surveys	12(6)	1.8	14(5)	1.9	1.5
City Hall X-ray Units	22(9)	3.3	23(8)	3.1	2.4
Food Handlers	—(—)	—	4(1)	.5	.3
Correctional Institutions	8(3)	1.2	8(4)	1.1	1.2
Provincial and Hospital Laboratories	7(6)	1.1	9(9)	1.2	2.7
Miscellaneous Surveys	1(—)	.2	1(—)	.1	—
Mental Hospitals	13(5)	2.0	36(10)	4.8	2.9
Miscellaneous Sources	11(3)	1.6	11(4)	1.5	1.2
Information from Private Physicians	—(—)	—	24(8)	3.2	2.4
TOTAL	665(310)		745(336)		

Figure in brackets indicates number of active cases included in preceding number.

6. CLASSIFICATION OF NEW CASES OF ACTIVE AND INACTIVE TUBERCULOSIS			
	Active	Inactive	Total
Minimal	55	312	367
Moderately Advanced	74	60	134
Far Advanced	39	3	42
Primary	74	—	74
Tuberculosis Pleurisy with Effusion and evidence of previous Pleurisy	23	10	33
Non-respiratory Tuberculosis	67	24	91
Miliary	4	—	4
TOTAL	336	409	745

DEPARTMENT OF HEALTH

7. NEWLY DISCOVERED AND REACTIVATED CASES ACCORDING TO RESIDENCE (PUBLIC HEALTH SUPERVISION)

Health Unit	New Active	%	*Rate	New Inactive	%	*Rate	Total New	%	*Rate	Reactiv- ated	%
Alberta East Central	8	2.4	16.0	6	1.5	12.0	14	1.9	28	1	2.0
Athabasca	12	3.6	55.0	19	4.7	87.1	31	4.2	142.1	3	6.2
Banff National Park	—	—	—	1	.3	28.0	1	.1	28	—	—
Barons-Eureka	2	.6	7.6	4	1.0	15.2	6	.8	22.8	1	2.0
Big Country	2	.6	14.2	2	.5	14.3	4	.5	28.5	—	—
Chief Mountain	—	—	—	—	—	—	—	—	—	—	—
Chinook	—	—	—	3	.7	14.0	3	.4	14	—	—
Drumheller	4	1.2	14.6	4	1.0	14.7	8	1.1	29.3	—	—
Edson	2	.6	8.7	13	3.2	56.8	15	2.0	65.5	—	—
Foothills	2	.6	9.8	—	—	—	2	.3	9.8	—	—
Grande Prairie	7	2.0	19.1	16	3.9	43.4	23	3.1	62.5	—	—
Jasper National Park	—	—	—	—	—	—	—	—	—	—	—
Leduc-Strathcona	9	2.7	25.1	6	1.5	16.7	15	2.0	41.8	—	—
Lethbridge	4	1.2	11.1	5	1.2	13.5	9	1.2	24.6	1	2.0
Medicine Hat	3	.9	6.1	3	.7	6.1	6	.8	12.2	—	—
Minburn-Vermilion	7	2.1	24.6	10	2.4	35.6	17	2.4	60.2	—	—
Mount View	3	.9	10.1	4	1.0	13.5	7	.9	23.6	1	2.0
North Eastern Alberta	15	4.5	42.2	30	7.3	84.3	45	6.0	126.5	2	4.1
Peace River	9	2.7	24.6	14	3.4	38.2	23	3.1	62.8	1	2.0
Red Deer	10	3.0	14.6	6	1.5	8.8	16	2.2	23.4	1	2.0
Stony Plain-Lac Ste. Anne	6	1.7	25.1	5	1.2	20.6	11	1.5	45.7	—	—
Sturgeon	5	1.6	9.6	12	2.9	22.9	17	2.4	32.5	—	—
Vegreville	10	3.0	34.9	9	2.2	31.4	19	2.6	66.3	1	2.0
County of Warner	—	—	—	—	—	—	—	—	—	—	—
Wetoka	7	2.0	23.8	6	1.5	20.4	13	1.8	44.2	—	—
City of Calgary	40	11.8	11.9	90	22.0	26.8	130	17.4	38.7	7	14.4
City of Edmonton	90	26.8	23.6	93	22.7	24.4	183	24.4	48	22	44.9
Miscellaneous	—	—	—	—	—	—	—	—	—	—	—
(Areas not included in above listing)	15	4.5	—	37	9.0	—	52	6.9	—	1	2.0
Registered Indians	64	19.0	256	11	2.7	44.0	75	10.0	300	7	14.4
TOTAL FOR PROVINCE	336	100	22.4	409	100	27.3	745	100	49.8	49	100

*Rate per 100,000 of Population

Number of cases reactivated (includes 7 Registered Indians and 10 Unregistered Indians)	49	
Number of non-residents diagnosed tuberculosis (includes 77 Immigrants)	80	(9 active)
Number of Registered Indians diagnosed tuberculosis	86	(75 active)
Number of Unregistered Indians diagnosed tuberculosis	47	(30 active)
Number of known contacts of newly discovered active and reactivated cases	3,599	
Number known to be checked	2,581	(71.7%)
Number new positive reactors under age 3 years	11	
Number with active or reactivated disease on out-patient drug therapy only	16	

OLD TUBERCULIN DISTRIBUTED DURING 1967

	BMS	A.M.S.	Total
Dilution #2	88	195	283
Dilution #3	298	899	1,197
Dilution #4	50	3	53
Purified Protein Derivative	318	1,238	1,556
TOTAL	754	2,335	3,089

B.C.G. VACCINATIONS 1967

1. Nurses (a) Graduates	3
(b) Students	1,062
(c) Other Nursing Personnel	580
2. All other Hospital Personnel	118
3. Medical Students	62
4. Indians and Eskimos:	
(a) Newborn	0
(b) Adults and Children	0
5. All Other Persons:	
(a) Newborn, contacts	0
(b) Adults and Children, contacts	12
(c) Newborn, not contacts	0
(d) Adults and Children, not contacts	60
TOTAL	1,897

8. INSTITUTIONAL REPORT				
	BMS	AMS	CCIH	AH
Number of patients under treatment January 1, 1967	53	152	59	121
Number admitted during 1967	161	427	33	39
Number transferred in during 1967	1	14	—	5
Number treated during 1967	215	593	92	165
Number discharged and died during 1967	165	425	72	68
Number transferred out during 1967	—	4	11	9
Number transferred out, discharged or died during 1967	165	429	83	77
Number under treatment December 31, 1967	50	164	9	88
	T.B. Division		Province	
Number of patients under treatment January 1, 1967	205		385	
Number of admissions during 1967	603		660	
Number of patients treated during 1967	808		1,065	

DIAGNOSIS OF PATIENT ADMISSIONS — TUBERCULOSIS DIVISION

ACTIVE TUBERCULOSIS	BMS	AMS
Minimal	8	61
Moderately Advanced	27	85
Far Advanced	24	41
Miliary	2	4
Primary	10	67
Pleurisy	6	14
Silico-tuberculosis	—	—
Abscess	—	3
Adenitis	4	22
Addison's Disease	—	1
Bone	1	9
Erythema Nodosum	—	—
Eye	—	—
Genito-urinary	4	19
Lupus Vulgaris	—	1
Meningitis	3	—
Pelvic	2	—
Pericarditis	—	—
Anal Fistula	—	—
Tuberculous Myelophthisic Anemia	—	1
Positive Tuberculin Only	6	—
Tuberculosis Inactive	16	34
Non-tuberculous Disease	4	12
For Diagnosis	44	53
TOTAL	161	427

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium
Number with positive sputum on admission	33	95
Number of re-admissions during 1967	39	94
Number both admitted and re-admitted during 1967	—	23
Number left against advice during 1967	7	60
Number of patient days	22,021	63,119
Number of patient days in other provinces under Reciprocal Agreement		69
Total number of patient days including those in other provinces under Reciprocal Agreement		85,209
Number of patients in other provinces (Reciprocal Agreement) January 1, 1967		—
Number of admissions in other provinces under Reciprocal Agreement		3
Number of institutional patient days provided for non- residents in Alberta under Reciprocal Agreement		1,027
Number of patients in Alberta Sanatoria, non-residents, under Reciprocal Agreement, January 1, 1967		4
Number of admissions, non-residents, under Reciprocal Agreement		6
Number of active tuberculosis cases admitted for treatment who have a history of tuberculosis, but who are not known to have been admitted for treatment anywhere previously		27
Number 'chronic alcoholics' admitted		20
Number cases suspect carcinoma either on admission or by x-ray		47

DEPARTMENT OF HEALTH

OPERATING ROOM REPORT			
	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
CHEST OPERATIONS:			
Major:			
Lung Biopsy	—	2	2
Lobectomy	4 (3 Foothills)	12	16
Removal Plombage	—	1	1
Rib Resection	—	2	2
Segmental Resection	3 (3 Foothills)	3	6
Thoracoplasty	2 (2 Foothills)	1	3
Thoracoplasty with Pack	1	—	1
Lobectomy and Thoracoplasty	1	—	1
Removal of extra pleural Wax Plombage and Thoracoplasty	1	—	1
Pneumonectomy	1 (1 Foothills)	1	2
Pneumonectomy with Thoracoplasty	—	1	1
Minor:			
Bronchoscopy	20	36	56
Chest Aspiration	31	11	42
Bronchial Biopsy	15	3	18
Bronchoscopy and Lung Biopsy	—	1	1
Thoracotomy	1	—	1
GENITO-URINARY OPERATIONS:			
Major:			
Orchidectomy	—	1	1
Nephrectomy	2	2	4
Ureteroneocystostomy	—	1	1
Minor:			
Cystoscopy	4	13	17
Urethral Dilatation	—	1	1
ORTHOPAEDIC OPERATIONS:			
Major:			
Posterior Fusion	1	—	1
Arthroplasty	—	1	1
Removal of pin and plate from hip	—	1	1
Drainage psoas abscess, curettage abscess with bone graft to abscess cavity	2 (2 Foothills)	—	2
Minor:			
Biopsy	1	—	1
Setting of Colles' Fracture	—	1	1
Reduction of dislocated shoulder	—	1	1
Repair of traumatic amputation finger	—	1	1
Removal of corns and bone spurs	—	1	1
GYNAECOLOGICAL OPERATIONS:			
Major:			
Hysterectomy and Bilateral Salpino-oophorectomy	1 (1 Foothills)	—	1
Minor:			
Dilatation and curettage	1	—	1
OTHER MAJOR OPERATIONS:			
Repair right inguinal hernia	—	1	1
OTHER MINOR OPERATIONS:			
Insertion D.O.C.A.	3	9	12
Aspiration (other than chest)	5	—	5
Laryngoscopy	1	—	1
Skin Biopsy	1	1	2
Removal rodent Ulcer	—	1	1
Excision of Cervical Glands	—	2	2
Removal of Lipoma	—	1	1
Biopsy	1	1	2
Sigmoidoscopy	—	1	1
Esophagoscopy	—	1	1
Laparotomy and Biopsy of Omentum	—	1	1
Suturing lacerated chin	—	1	1
Scalene Node Biopsy	1	5	6
Excision of Rectal Fistula	—	1	1
Liver Biopsy	—	2	2
Biopsy—left breast	—	1	1
MISCELLANEOUS PROCEDURES			
	62	8	70
TOTAL	166	135	301

N.B. (Foothills) indicates that this surgery was done at the Foothills General Hospital in Calgary for Sanatorium patients.

SUMMARY PNEUMOTHORAX CASES

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Under treatment January 1, 1967	1	—	1
Under treatment December 31, 1967	1	—	1
Refills:			
Out-patient	10	—	10

SUMMARY PNEUMOPERITONEUM CASES

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Under treatment January 1, 1967	—	—	—
Under treatment December 31, 1967	—	1	1
Refills:			
In-patient	—	11	11
Out-patient	—	28	28
TOTAL	—	40	40

NUMBER OF PATIENTS DISCHARGED ON DRUGS 1967

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Isoniazid	3	—	3
Isoniazid and Para-amino Salicylic Acid	55	180	235
Ethionamide and Pyrazinamide	—	3	3
Isoniazid and Parasol	—	11	11
Para-amino Salicylic Acid and Streptomycin	1	1	2
Streptomycin, Isoniazid and Para-amino Salicylic Acid	11	5	16
Ethionamide and Isoniazid	—	3	3
Isoniazid and Streptomycin	3	8	11
Parasol and Streptomycin	—	1	1
Isoniazid, Para-amino Salicylic Acid and Ethionamide	—	1	1
Isoniazid and Pyrazinamide	—	3	3
Isoniazid and Isoxyl	7	—	7
Isoxyl, Para-amino Salicylic Acid and Isoniazid	2	1	3
Para-amino Salicylic Acid, Streptomycin, Isoniazid and Seromycin	1	—	1
Isoxyl, Seromycin and Isoniazid	1	—	1
TOTAL	84	217	301

LABORATORY REPORT

SPUTUM EXAMINATIONS:	BMS	AMS	Total
Positive	264	315	579
Negative	1,156	1,570	2,726
TOTAL	1,420	1,885	3,305
URINE EXAMINATIONS	5,442	8,346	13,788
BLOOD EXAMINATIONS:			
Blood Counts	2,747	5,293	8,040
Sedimentation Rates	1,715	2,972	4,687
Blood Sugar	302	736	1,038
TOTAL	4,764	9,001	13,765
MISCELLANEOUS:			
Pleural Fluid	24	7	31
Spinal Fluid	8	16	24
Gastric Analysis	—	1	1
Culture	3,987	1,642	5,629
Guinea Pig Inoculation	375	390	765
Other	2,381	2,990	5,371
TOTAL	6,775	5,046	11,821
WASSERMAN REPORT:			
Positive	6	11	17
Negative	148	354	502
TOTAL	154	365	519

DENTAL REPORT

Number of patients (individuals)	260	289	549
Number of treatments	67	436	503
Number of prophylactic treatments	—	12	12
Number of fillings	60	133	193
Number of extractions	41	219	260
Number of new dentures and repairs	—	72	72
TOTAL	428	1,161	1,589

MISCELLANEOUS PROCEDURES

Basal Metabolism Rate	—	2	2
Cardiograph	29	74	103
Audiogram	4	—	4
TOTAL	33	76	109

DEPARTMENT OF HEALTH

X-RAY DEPARTMENT REPORT

	Baker Memorial Sanatorium		Aberhart Memorial Sanatorium		Total	Total	Grand Total
	In Pts.	Out Pts.	In Pts.	Out Pts.	In Pts.	Out Pts.	
Radiographs Made:							
Chest—Full Size	684	1,159	1,825	2,574	2,509	3,733	6,242
Miniature	—	2,099	—	7,570	—	9,669	9,669
Ribs	—	—	2	—	2	—	2
Pelvis	7	6	11	6	18	12	30
Extremities	23	24	43	38	66	62	128
Spines—Cervical	—	2	3	2	11	4	15
Dorsal	15	12	13	9	28	21	49
Lumbar	39	23	17	6	56	29	85
Skull	14	2	5	—	19	2	21
Sinuses	—	—	—	—	—	—	—
F.P. Abdomen	2	—	4	—	6	—	6
G.B. Series	5	—	7	—	12	—	12
Barium Enema	7	—	3	—	10	—	10
Intravenous Pyelogram	33	5	51	19	84	24	108
Retrograde Pyelogram	3	—	6	—	9	—	9
Sinogram	—	—	10	2	10	2	12
Bronchogram	38	—	23	1	61	1	62
Ordographs (body section radiography)	151	9	68	17	219	26	245
Dental	49	—	112	—	161	—	161
Sacroiliac Joint	2	—	—	—	2	—	2
Shoulder	3	2	—	—	3	2	5
G.I. Series	—	—	2	—	2	—	2
TOTAL	1,083	3,343	2,205	10,244	3,288	13,587	16,875
Fluoroscopic Examinations	37	2	—	—	37	2	39
Films sent in for interpretation		16,418		10,896			27,314

CLASSIFICATION ON ADMISSION OF 590 DISCHARGED PATIENTS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
For Diagnosis	57	59	116
Primary Tuberculosis	15	65	80
Pulmonary Tuberculosis	71	223	294
Tuberculous Pleurisy	2	17	19
Non-pulmonary Tuberculosis	20	61	81
TOTAL	165	425	590

CLASSIFICATION ON DISCHARGE OF CASES OF TUBERCULOSIS AND TUBERCULOUS PLEURISY (TUBERCULOSIS DIVISION ONLY)

	ON ADMISSION		ON DISCHARGE			Died
	Number	Improved	Quiescent	Unimproved	Inactive	
Minimal	84	59	1	3	19	2
Moderately Advanced	123	84	4	5	23	9
Far Advanced	81	57	2	—	5	15
Primary	78	74	—	—	4	—
Miliary	7	5	—	—	2	—
Non-pulmonary Tuberculosis	82	74	—	2	5	1
Tuberculous Pleurisy	18	18	—	—	—	—
TOTAL	473	371	7	10	58	27

RESIDENCE OF DISCHARGED PATIENTS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
SUMMARY:			
Cities	91	175	266
Towns (not included in Health Units or Counties) ..	—	1	1
Villages	—	—	—
Counties	—	—	—
Enlarged Municipal Districts	—	—	—
Local Improvement Districts	1	34	35
Health Units	64	189	253
Non-Residents	9	26	35
TOTAL	165	425	590

SEX OF DISCHARGED PATIENTS (TUBERCULOSIS DIVISION)

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total
Male	93	225	318
Female	72	200	272
TOTAL	165	425	590

AGE ON ADMISSION OF DISCHARGED PATIENTS (TUBERCULOSIS DIVISION)

4 years and under	21	38	59
From 5 - 9 years	8	19	27
From 10 - 14 years	2	19	21
From 15 - 19 years	3	34	37
From 20 - 29 years	19	67	86
From 30 - 39 years	25	63	88
From 40 - 49 years	22	49	71
From 50 - 59 years	22	51	73
From 60 - 69 years	18	41	59
From 70 - 79 years	15	33	48
80 years and over	10	11	21
TOTAL	165	425	590

SOCIAL STATUS OF DISCHARGED PATIENTS (TUBERCULOSIS DIVISION)

Single	48	183	231
Married	91	177	268
Divorced	3	8	11
Separated	3	21	24
Widowed	20	36	56
TOTAL	165	425	590

DISCHARGED PATIENTS OF NON-WHITE ORIGIN (TUBERCULOSIS DIVISION)

Metis	3	116	119
Registered Indians	26	59	85
East Indians	—	—	—
Chinese	5	16	21
Japanese	3	—	3
Negro	1	1	2
Eskimo	—	1	1
TOTAL	38	193	231

RESIDENCE IN ALBERTA OF DISCHARGED PATIENTS (TUBERCULOSIS DIVISION)

	Baker Memorial Sanatorium			Aberhart Memorial Sanatorium		
	Canadian Born (exclusive of Reg. Indians)	Foreign Born	Registered Indians	Canadian Born (exclusive of Reg. Indians)	Foreign Born	Registered Indians
Non-Resident	—	—	—	5	1	1
Under 1 year	3	3	2	11	6	4
1 - 5 years	15	4	10	33	6	5
6 - 9 years	6	7	2	13	5	1
10 - 14 years	9	11	—	21	7	3
15 - 19 years	6	4	—	26	9	4
20 - 29 years	10	5	3	46	3	19
30 or more years	29	27	9	146	32	21
TOTAL	78	61	26	296	69	58

LENGTH OF STAY IN SANATORIUM OF DISCHARGED PATIENTS

	Baker Memorial Sanatorium	Aberhart Memorial Sanatorium	Total Tub. Division	*Charles Cammell Hospital	Grand Total
DEATHS					
Number in Sanatorium under 31 days	3	9	12	—	12
Number of patient days	28	120	148	—	148
Average number of patient days	9.3	13.3	12.3	—	12.3
Number in Sanatorium 31 or more days	3	19	22	—	22
Number of patient days	491	10,061	10,552	—	10,552
Average number of patient days	163.7	529.5	479.6	—	479.6
DISCHARGES					
Number in Sanatorium under 31 days	58	89	147	7	154
Number of patient days	764	1,859	2,623	119	2,742
Average number of patient days	13.2	20.9	17.8	17.0	17.8
Number in Sanatorium 31 or more days	101	308	409	64	473
Number of patient days	25,653	60,374	86,027	19,519	105,546
Average number of patient days	254	196	210.3	305	223
Total number deaths and discharges	165	425	590	71	661
Total number patient days	26,936	72,413	99,350	19,638	118,988
Average number patient days	163.1	170.4	168.4	276.6	180

*Alberta Indians only considered in these figures.

DIVISION OF MENTAL HEALTH

A. R. Schrag, M.D., C.R.C.P. (C), Director

ADMINISTRATION

The Division of Mental Health concerns itself with the provision of treatment and preventive services for mentally disordered persons. Treatment and care of the mentally ill was provided by two active treatment hospitals, two continued care hospitals, and a geriatric hospital. There is a unit for emotionally disturbed children and a school hospital for retarded children admitted under the age of 16, and a hospital for the care and rehabilitation of the adult mental retardate.

Reviewing the patterns of hospitalization within the Division of Mental Health, it is noteworthy that during the years 1962 to 1967 inclusive, while the admissions to active treatment hospitals increased from 2,382 to 3,474, a difference of 1,092 patients, the number of patients in hospital at the end of the year in 1967 was 460 less than at the end of the year 1962. During the same period of time the number of patients in continued treatment and geriatric hospitals was increased by 201, giving a net decrease of 259 patients in the combined psychiatric facilities of the Division.

In the case of the mentally retarded facilities, there was an increase in population of 465 during the same period of time.

During 1967 several studies of the existing facilities were made to assist in the planning for the orderly expansion or replacement of present facilities and new facilities which will be required in the future.

Two older ward units were closed and a third was made unusable by a fire in which no injuries were sustained. A newly renovated ward building was occupied and a new ward building was completed just prior to the year's end.

Contracts were let late in the year for an Occupational and Recreational Therapy Building and a Staff Residence at the Alberta Hospital, Claresholm, and a Services Building and a Ward Building at Rosehaven, Camrose.

Another ward unit was renovated for the care of handicapped retarded children at the Baker Memorial Sanatorium, Calgary.

Plans were prepared for four new buildings to be put to tender in the ensuing year.

The Mental Health Act continued to function satisfactorily although there were several complaints to the Ombudsman which indicated the desirability of amendments to The Criminal Code of Canada which would extend the right of complaint to a review panel to patients detained by Order of the Lieutenant Governor in Council.

The Advisory Committee under The Psychiatric Nursing Training Act was active in a revision of nursing training and the program was expanded at the Alberta Hospital, Ponoka.

Review Panels

There were in all 52 complaints made by 22 men and 27 women. In a number of instances more than one complaint was made by the same individual.

In seven cases the Review Panel decided that the patients had improved to such an extent that certificates were no longer necessary. In only one case did the Review Panel find that the certificates should not have been issued.

It should be noted that certificates were received on some 1,622 patients during the year, either on admission (1,312), or by change of form of admission (537), or by renewal certificates (266).

PREVENTIVE SERVICES

The Alberta Guidance Clinic, Calgary, moved to new and enlarged quarters in the Natural Resources Building.

Although there was difficulty recruiting staff with higher levels of training, particularly psychiatrists, there was an increase in both the number of social workers and psychologists.

There was an increase of 138 new cases and 61 re-registered cases with an increase of the work-load of 10,429 interviews which was largely accounted for by increased activity in the Lethbridge-Medicine Hat area.

The source of referrals and diagnostic categories of cases referred show little variation from previous years.

The largest groups of diagnoses were:

PRE-SCHOOL AGE GROUP:

Transient Situational Reactions	21.9%
Mental Deficiency	20.6%
Deferred Diagnoses	20.9%
Chronic Brain Disorders	11.0%

SCHOOL AGE GROUP:

Transient Situational Reactions	34.1%
Mental Deficiency	16.3%
Personality Disorders	15.2%

16 AND OVER AGE GROUP:

Psychoneurotic Disorders	25.2%
Personality Disorders	14.6%
Transient Situational Disorders	14.4%

In all age groups, 1,164 new cases of mental deficiency were examined.

The reports of the individual clinics follow the consolidated statistical tables of clinic activity.

TABLE 1
PROFESSIONAL STAFF, NEW AND RE-REGISTERED CASES, TREATMENT
PERIODS INTERVIEWS, PSYCHOLOGICAL EXAMINATIONS AND WORKLOAD BY CLINIC AREAS

CLINIC AREA	STAFF			NEW CASES			RE-REGISTERED CASES			DISTRIBUTION OF WORK				Workload
	Psychi- atrists	Psychol- ogists	Social Workers	M	F	T	M	F	T	Pat.	Col.	Gen.	P. E.	
Calgary and District	3	9	8 10/12	485	280	765	379	179	558	5,700	5,721	16,284	2,180	29,708
Edmonton and District	4 7/12	9 3/12	11 4/12	1,326	758	2,084	452	270	722	4,366	7,263	13,247	2,428	27,304
Lethbridge, Medicine Hat and District	1	3 1.5/12	3 4.5/12	331	178	509	213	115	328	2,540	2,587	640	648	6,415
Ponoka and District	4.2/12	.3/12	.002/12	113	88	201	283	203	486	671	167	58	73	969
Red Deer and District	1	2	1 4/12	318	256	574	87	100	187	1,973	1,355	156	568	4,052
TOTALS	9 11.2/12	23 4.8/12	24 10.502/12	2,573	1,560	4,133	1,414	867	2,281	15,250	17,093	30,385	5,897	68,448

TOTAL NEW CASES SINCE 1929 - 50,167

Edmonton and District - Area East and West from Wetaskiwin North. Clinics held in Athabasca, Barrhead, Bonnyville, Camrose, Edson, Fort McMurray, Holden, Killam, Lac La Biche, Lamont, Peace River, Grande Prairie, Smoky Lake, St. Paul, Two Hills, Thorhild, Vegreville, Vermilion, Wainwright, Westlock and Wetaskiwin.

Calgary and District - Area East and West from Didsbury to Claresholm. Clinics held in Drumheller, Three Hills and Hanna.

Lethbridge and Medicine Hat Districts - Area East and West from Claresholm South. Clinics held in Brooks, Crowsnest Pass, Pincher Creek and Vulcan.

Ponoka, Red Deer and Districts - East and West from Wetaskiwin to Didsbury. Clinics held in Castor, Stettler, Rimbey, Rocky Mountain House, Ponoka and Red Deer.

New Cases - Patients examined for the first time by any Guidance Clinic in the Province.

Re-Registered Cases - Patient has been examined in Alberta Guidance Clinic prior to present year.

Pat. - Patient Interview, Diagnosis or Therapeutic.

Col. - Collateral Contact with Parents, Relatives or those closely interested or related to the patient.

Gen. - General Contact regarding Clinic activity, including those with other agencies and community services including talks, addresses and teaching periods by staff members.

P. E. - Psychological Examinations and Tests.

TABLE 2
AGE AND SEX CLASSIFICATION OF NEW CLINIC CASES

Age Group	Calgary and District			Edmonton and District			Lethbridge, Medicine Hat and District			Ponoka and District			Red Deer and District			TOTALS			Percentage of Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 - 5	88	55	143	276	147	423	22	19	41	-	-	-	20	18	38	406	239	645	15.8	15.3	15.6
6 - 10	225	86	311	590	329	919	145	65	210	13	4	17	79	46	125	1,052	530	1,582	40.9	34.0	38.3
11 - 15	134	79	213	371	207	578	80	50	130	19	18	37	52	30	82	656	384	1,040	25.5	24.6	25.2
16 - 20	29	29	58	65	37	102	32	12	44	2	4	6	40	41	81	168	123	291	6.5	7.9	7.0
21 - 30	2	16	18	10	10	20	23	8	31	17	5	22	60	65	125	112	104	216	4.3	6.7	5.2
31 - 50	6	14	20	10	26	36	25	18	43	38	52	90	49	42	91	128	152	280	5.0	9.7	6.8
51 +	1	1	2	4	2	6	4	6	10	24	5	29	18	14	32	51	28	79	2.0	1.8	1.9
TOTALS	485	280	765	1,326	758	2,084	331	178	509	113	88	201	318	256	574	2,573	1,560	4,133	100.0	100.0	100.0

PERCENTAGE: M - % of Total New Male Cases, F - % of Total New Female Cases, T - % of Total New Cases

TABLE 3A
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES - PRE-SCHOOL AGE GROUP
(0 - 5 Years, 11 Months)

DIAGNOSIS	Calgary and District		Edmonton and District		Lethbridge, Medicine Hat and District		Ponoka and District		Red Deer and District		TOTALS		Percentage of Totals **	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Acute Brain Disorders	1	-	-	-	-	-	-	-	-	-	1	-	.3	.2
Chronic Brain Disorders	5	2	33	20	2	2	-	2	5	7	42	29	10.3	11.0
Psychotic Disorders	1	-	-	1	-	-	-	-	-	-	1	1	.2	.3
Psycho Physiological Disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psycho Neurotic Disorders	-	-	2	1	-	-	-	-	-	-	2	1	.5	.5
Personality Disorders	8	5	17	7	2	2	-	1	1	2	28	15	6.9	6.7
Transient Situational Disorders	44	25	45	17	3	-	-	5	2	7	97	44	23.9	21.9
Mental Deficiency*	8	15	53	38	2	7	-	6	4	10	69	64	17.0	20.6
Diagnosis Deferred	11	2	72	32	10	7	-	-	1	1	93	42	23.0	20.9
Normal Child	10	6	37	23	1	-	-	6	3	9	54	32	13.3	13.3
Examination or Test Only	-	-	-	-	1	1	-	-	2	2	1	3	.2	.6
Organic Disease	-	-	17	8	1	-	-	-	-	-	18	8	4.4	4.0
TOTALS	88	55	276	147	22	19	-	20	18	38	406	239	100.0	100.0

* Mental Deficiency - Hereditary and Idiopathic but not as a secondary diagnosis. ** Percentage - M - % of Total New Males, F - % of Total new Females, T - % of Total New Cases.

TABLE 3B
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES - SCHOOL AGE GROUP
(6 years to 15 years, 11 months)

DIAGNOSIS	Calgary and District			Edmonton and District			Lethbridge, Medicine Hat and District			Ponoka and District			Red Deer and District			TOTALS			Percentage of Totals **		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Acute Brain Disorders	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	1	-	1	.1	-	.1
Chronic Brain Disorders	4	1	5	26	18	44	9	2	11	-	-	-	13	9	22	52	30	82	3.0	3.3	3.1
Psychotic Disorders	1	-	1	3	5	8	-	-	-	12	-	12	-	-	-	16	5	21	.9	.5	.8
Psycho Physiological Disorders	4	4	8	3	1	4	3	2	5	-	-	-	1	-	1	11	7	18	.6	.8	.7
Psycho Neurotic Disorders	34	20	54	27	24	51	-	-	-	-	12	12	-	2	2	61	58	119	3.6	6.3	4.5
Personality Disorders	52	17	69	153	46	199	52	11	63	8	4	12	42	13	55	307	91	398	18.0	10.0	15.2
Transient Situational Disorders	207	95	302	314	166	480	30	13	43	10	4	14	30	24	54	591	302	893	34.6	33.0	34.1
Mental Deficiency*	27	18	45	187	115	302	22	19	41	-	-	-	24	15	39	260	167	427	15.2	18.3	16.3
Diagnosis Deferred	11	4	15	126	92	218	78	50	128	2	2	4	-	-	-	217	148	365	12.7	16.2	13.9
Normal Child	19	6	25	106	59	165	11	4	15	-	-	-	14	8	22	150	77	227	8.8	8.4	8.6
Examination or Test Only	-	-	-	5	1	6	13	13	26	-	-	-	7	5	12	25	19	44	1.5	2.1	1.7
Organic Disease	-	-	-	10	9	19	7	1	8	-	-	-	-	-	-	17	10	27	1.0	1.1	1.0
TOTALS	359	165	524	961	536	1,497	225	115	340	32	22	54	131	76	207	1,708	914	2,622	100.0	100.0	100.0

* Mental Deficiency - Hereditary and Idiopathic but not as a secondary diagnosis. ** Percentage - M - % of Total New Males, F - % of Total New Females, T - % of Total New Cases.

TABLE 3C
DIAGNOSTIC CLASSIFICATION OF NEW CLINIC CASES - ADULT GROUP
(16 years and over)

DIAGNOSIS	Calgary and District			Edmonton and District			Lethbridge, Medicine Hat and District			Ponoka and District			Red Deer, and District			TOTALS			Percentage of Totals **		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Acute Brain Disorders	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	1	-	1	.2	-	.1
Chronic Brain Disorders	1	-	1	6	2	8	3	2	5	-	-	-	5	3	8	15	7	22	3.3	1.7	2.5
Psychotic Disorders	-	1	1	5	4	9	3	1	4	3	20	23	8	20	28	19	46	65	4.1	11.3	7.5
Psycho Physiological Disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psycho Neurotic Disorders	5	16	21	4	14	18	4	6	10	65	31	96	19	54	73	97	121	218	21.1	29.7	25.2
Personality Disorders	13	15	28	18	9	27	15	3	18	3	1	4	26	23	49	75	51	126	16.4	12.5	14.6
Transient Situational Disorders	16	15	31	29	23	52	5	3	8	6	8	14	11	9	20	67	58	125	14.6	14.3	14.4
Mental Deficiency *	-	2	2	4	6	10	2	1	3	-	-	-	1	-	1	7	9	16	1.5	2.2	1.9
Diagnosis Deferred	1	5	6	10	13	23	43	22	65	4	6	10	-	-	-	58	46	104	12.6	11.3	12.0
Normal Child	2	1	3	8	2	10	1	1	2	-	-	-	6	14	20	17	18	35	3.7	4.4	4.0
Examination or Test Only	-	5	5	-	1	1	4	2	6	-	-	-	89	37	126	93	45	138	20.3	11.1	15.9
Organic Disease	-	-	-	5	1	6	3	3	6	-	-	-	2	2	4	10	6	16	2.2	1.5	1.9
TOTALS	38	60	98	89	75	164	84	44	128	81	66	147	167	162	329	459	407	866	100.0	100.0	100.0
TOTALS Table 3A	88	55	143	276	147	423	22	19	41	-	-	-	20	18	38	406	239	645	15.8	15.3	15.6
Table 3B	359	165	524	961	536	1,497	225	115	340	32	22	54	131	76	207	1,708	914	2,622	66.4	58.6	63.4
Table 3C	38	60	98	89	75	164	84	44	128	81	66	147	167	162	329	459	407	866	17.8	26.1	21.0
GRAND TOTALS	485	280	765	1,326	758	2,084	331	178	509	113	88	201	318	256	574	2,573	1,560	4,133	100.0	100.0	100.0

* Mental Deficiency - Hereditary and Idiopathic but not as a secondary diagnosis.

** Percentage - M - % of Total New Males, F - % of Total New Females, T - % of Total New Cases.

TABLE 4
SOURCES REFERRING NEW CASES TO CLINICS

Referral Source	Calgary and District			Edmonton and District			Lethbridge, Medicine Hat and District			Ponoka and District			Red Deer and District			TOTALS			Percentage of Totals *		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Schools and School Authorities	23	13	36	504	212	716	50	29	79	6	15	21	43	18	61	626	287	913	24.3	18.4	22.1
Private Doctors and Medical Clinics	16	13	29	231	150	381	43	29	72	90	46	136	64	103	167	444	341	785	17.3	21.9	19.0
Medical Clinics, Rehabilitation, Cerebral Palsy, TB, O. P. D.	7	3	10	44	27	71	-	-	-	-	-	-	57	22	79	108	52	160	4.2	3.3	3.9
Health Units, Public Health Nurses, M. O. H.	52	21	73	73	43	116	126	63	189	2	2	4	26	12	38	279	141	420	10.8	9.0	10.2
Child Welfare - Provincial and Municipal	83	49	132	112	94	206	9	6	15	1	1	2	23	16	39	228	166	394	8.9	10.7	9.5
Juvenile and Family Court, Gaols, Bowden Institute	7	1	8	11	2	13	26	5	31	-	-	-	18	6	24	62	14	76	2.4	.9	1.8
Parents, Relatives, Friends, Self	289	164	453	312	196	508	51	35	86	13	23	36	51	64	115	716	482	1,198	27.8	30.9	29.0
Dept. of Health (Prov.)	2	16	18	-	2	2	2	1	3	1	1	2	-	2	2	5	22	27	.2	1.4	.6
Other	6	-	6	39	32	71	24	10	34	-	-	-	36	13	49	105	55	160	4.1	3.5	3.9
TOTALS	485	280	765	1,326	758	2,084	331	178	509	113	88	201	318	256	574	2,573	1,560	4,133	100.0	100.0	100.0

* Percentage M - % of Total New Male Cases
F - % of Total New Female Cases
T - % of Total New Cases

TABLE 5
MAJOR RECOMMENDATIONS MADE IN REGARD TO NEW CLINIC CASES

Recommendation	Calgary and District			Edmonton and District			Lethbridge, Medicine Hat and District			Ponoka and District			Red Deer and District			TOTALS			Percentage of Totals		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Admission to: (a) Mental Hospital (b) Alberta School Hospital and Deerhome	1	-	1	2	-	2	6	1	7	3	6	9	3	4	7	15	11	26	.6	.7	.6
Placement in Protective or Correctional Home or Institution	6	4	10	23	22	45	2	3	5	-	-	-	-	4	4	31	33	64	1.2	2.1	1.6
Placement in Foster Home	19	6	25	7	5	12	-	-	-	-	-	-	2	3	5	28	14	42	1.1	.9	1.0
Placement in Foster Home	21	9	30	18	12	30	2	-	2	-	1	1	-	-	-	41	22	63	1.6	1.4	1.5
Educational Advice, Modified Program, Spec. Class, Vocational	13	7	20	269	158	427	47	22	69	1	1	2	82	32	114	412	220	632	16.0	14.1	15.3
Educational Advice, Other	17	13	30	162	56	218	3	-	3	12	2	14	-	1	1	194	72	266	7.5	4.6	6.5
Modified Home Management	220	90	310	199	102	301	10	4	14	1	1	2	31	32	63	461	229	690	17.9	14.7	16.7
Referred for Medical Treatment	5	3	8	60	45	105	7	2	9	4	6	10	13	38	51	89	94	183	3.5	6.0	4.4
Treatment in Clinic	113	94	207	128	105	233	25	20	45	83	66	149	151	104	255	500	389	889	19.4	25.0	21.5
Other	70	54	124	458	253	711	229	126	355	9	5	14	36	38	74	802	476	1,278	31.2	30.5	30.9
TOTALS	485	280	765	1,326	758	2,084	331	178	509	113	88	201	318	256	574	2,573	1,560	4,133	100.0	100.0	100.0

TABLE 6
SUMMARY OF NUMBER OF MENTAL DEFECTIVES EXAMINED BY YEARS

YEAR	Severe I.Q. Below 50			Moderate I.Q. 50 - 70			Mild I.Q. 70 - 85			Unspecified			TOTALS			Percent of New Cases	Cumulative Totals
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T		
	Number of Mental Defectives Examined to 1958															-	5,266
1958	16	11	27	38	29	67	119	80	199	24	27	51	197	147	344	18.7	5,610
1959	13	10	23	56	44	100	159	121	280	27	15	42	255	190	445	22.3	6,055
1960	3	1	4	37	34	71	137	98	235	20	11	31	197	144	341	16.2	6,396
1961	13	14	27	40	33	73	154	118	272	55	38	93	262	203	465	20.2	6,861
1962	10	9	19	51	42	93	142	106	248	46	40	86	249	197	446	16.9	7,307
1963	20	10	30	59	48	107	194	142	336	76	53	129	349	253	602	20.0	7,909
1964	60	62	122	148	117	265	356	196	552	49	37	86	613	412	1,025	29.5	8,934
1965	71	43	114	150	124	274	262	183	445	66	57	123	549	407	956	25.6	9,890
1966	80	56	136	144	101	245	327	170	497	53	31	84	604	358	962	24.2	10,852
1967	78	64	142	150	109	259	327	175	502	146	115	261	701	463	1,164	28.2	12,016

I. Q. - Intelligence Quotient

M - Male, F - Female, T - Total

Includes cases of mental deficiency secondary to primary diagnosis

ALBERTA GUIDANCE CLINIC, CALGARY

N. C. Horne, M.B., M.R.C.S., D.P.M., Director

The professional staff at the year's end numbered 19 full-time and six half-time people. Of these only six full-time and four half-time members had a continuous service of over 12 months. The staff deficit was 12.5% of the minimum required for efficient service operation. It continued to be difficult to obtain senior trained staff for whom two vacancies remained. One medical officer resigned in June to go into private practice, and one medical officer trainee came on staff in July. The total professional staff interchange over the year involved 26 people.

The Clinic moved into pleasant new premises the middle of June which alleviated the over-crowding and lack of office space.

In-service training remained at the level of three and one-half hours per week for junior staff and trainees.

By arrangement with the University of Calgary two post-graduate psychologists carried out a clinical research project under joint supervision of the University and the Guidance Clinic for a three-month period, and two psychology students served a Clinical Internship during the four summer months.

Junior Residents from the General Practice Residency Programme at the General Hospital, Calgary, attended the Clinic on a rotation basis, four half-days a month, to receive instruction on interview techniques and participate in the intake routine of the Clinic. The first group of Junior Residents completed their year in June and a second group of first year Junior Residents began in September.

The Psychiatric and Educational Centre required considerable psychiatric supervision by and with the assistance of the professional staff in carrying out therapy. Arrangements for volunteers and for transportation of the children still remained a heavy responsibility. The Centre operated on a full day, five-day-a-week basis, with 16 children, together with one or both parents, under treatment. Lack of adequate space for the Centre created a problem.

SUMMARY OF NEW AND RE-REGISTERED CASES AND WORK LOAD

Clinic Centre	New Cases	Re-registered	Increase Decrease	Work Load
Calgary	725	509	— 91	29,146
Drumheller				
(Three Hills)	28	29	+ 1	389
Hanna	6	20	— 19	137
High River	6	—	+ 6	36
Total	765	558	—103	29,708

Due in part to referral sources becoming more skilful, the types of cases dealt with in 1967 were of a more serious and difficult nature. As a result a greater demand was placed on intensive treatment, consultation and follow-up procedure. This was reflected in the increase in work load and therapy hour figures.

AGE AND SEX DISTRIBUTION OF NEW CASES

Age Distribution	Male	Female	Total	Percentage
0 - 5/11	88	55	143	18.69
6 - 10/11	225	86	311	40.65
11 - 15/11	134	79	213	27.84
16 - 20/11	29	29	58	7.58
21 - 30/11	2	16	18	2.36
31 - 50/11	6	14	20	2.62
51 and over	1	1	2	.26
Total	485	280	765	100.00

The ratio of male to female cases is 1.73:1.

There were 205 mental defectives examined of whom 10 were recommended to the appropriate institution.

One emotionally disturbed child was admitted to the University Hospital, Edmonton.

One emotionally disturbed child was admitted to the Kiwanis Home, Edmonton.

One emotionally disturbed child was admitted to the Diagnostic and Treatment Centre, Edmonton.

Treatment Cases: There were 310 cases dealt with on modified home management lines and 207 cases referred for intensive treatment consideration in the Clinic.

Treatment carried out in the Clinic: A total of 227 cases was treated of which five were on drug therapy. The sex distribution was female to male 117 to 110 or 1.06:1.

New cases	106
Old cases continued in 1967	121
Total	227
Individual therapy	158
Group therapy	69
Total	227

TREATMENT CASES TERMINATED IN 1967

Much improved	21	96 or 88.08%
Improved	75	
Not improved	13	11.92%

Continued into 1968—118

ANALYSIS OF TIME SPENT IN THERAPY HOURS

	Psychiatrists	Psychologists	Social Workers	Total
Individual therapy	585	1,159	1,311	3,055
Group therapy	139	296	1,366	1,801
Family therapy	106	16	84	206
Possible treatment cases	56	388	1,051	1,495
Total	886	1,859	3,812	6,557

Each worker continued to supervise "possible treatment" cases.

THE "POSSIBLE TREATMENT" CASES

Number of cases carried from 1966	192
Number of cases added in 1967	353
Total	545

Number of cases closed:

Improved	136
Transferred to follow-up	44
Transferred to another agency	28
Transferred to intensive treatment	30
Moved away	23
Refused contact	75

Total 336

Number of cases continued into 1968—209

Ninety-nine cases were transferred from one worker to another because of staff changes.

An abbreviated man-power-hour system of recording was started in 1967 and from this system it was possible to analyse the work load.

	Overall	Senior Staff
Time spent on service	79.8	69.2
Time spent on administration	7.7	27.3
Time spent on education	7.7	6.5
Time spent on instruction	0.1	0.3
Time spent on research	0.6	0.0
Time spent unaccounted	4.1	2.0
	100.0	105.3

These were percentages of the available Clinic time and do not include activities undertaken outside Clinic time.

It was clear that, overall, 87.5% of the available time of all the staff was spent on service and administration. The burden of service plus administration falls more heavily upon the senior staff.

Demands were made upon the Clinic staff for teaching and research procedures, but it was clear, from the

distribution of service and administration requirements, that it was not possible to supply these without a redistribution of staff and work.

Public and Educational Activities

Public Education . . . 27 public addresses and panels
 Special Educational
 and Agency 39 addresses, seminars and panels
 Special Clinic Visitors 10 distinguished visitors

ALBERTA GUIDANCE CLINIC, EDMONTON

T. C. Michie, M.D., C.R.C.P.(C), Acting Director

The Alberta Guidance Clinic, Edmonton, and its sub-office in Grande Prairie provided preventive mental health services primarily for children up to about age 18 to the northern half of the Province of Alberta, an area bounded on the south by a line running from Jasper National Park through Wetaskiwin to Provost and extending northward to High Level and Fort Chipewyan.

When not travelling, the Edmonton Clinic served the Edmonton and Edmonton Rural area, an area consisting of 1,900 square miles and housing a population of 416,203. The Grande Prairie Clinic was responsible for the Grande Prairie and Peace River Health Unit areas, a population of 88,344 and an area of 44,700 square miles. When travelling, the Grande Prairie Clinic also reached points outside these Health Unit areas such as High Level, La Crete, Fort Vermilion, Wabasca-Desmarais, Kinuso, and Slave Lake. The two Clinics served a total area of 100,300 square miles and a population of 770,721.

Edmonton Clinic Teams consisting of a Psychiatrist, a Psychologist and a Psychiatric Social Worker, or more, depending on the case load, spent 84 working days travelling to towns within the following Health Unit areas:

- Jasper National Park, Edson, Stony Plain-Lac Ste. Anne, Sturgeon
- North Eastern Alberta
- Athabasca, Alberta East Central
- Minburn-Vermilion, Vegreville

Semi-annual trips were made to Fort Chipewyan and Fort McMurray in conjunction with the above trips. Special, non-scheduled trips were made as the demand arose and time and personnel permitted. All requests for special Clinics were met. Trips of this nature were made to Onoway, Whitecourt and Grande Prairie.

As in the past, a Psychiatrist and Psychologist from the Edmonton Clinic provided service to points in the Northwest Territories and the Yukon. In February, 13 patients were seen in Whitehorse and 20 in Yellowknife.

The Grande Prairie Clinic was staffed by two Psychologists, one Psychiatric Social Worker and two Clerks. A Psychiatrist from the Edmonton Clinic travelled to the Grande Prairie-Peace River areas three days a month except during July and August. In addition to travelling with the Edmonton Psychiatrist three days a month, the professional staff of the Grande Prairie Clinic spent another 60 days a year travelling to some 20 or more towns scattered throughout their area.

On April 1st the Clinic's establishment of personnel was increased by the addition of one Psychologist, one Psychiatric Social Worker and one Clerk-Stenographer. As at December 31st the positions available and filled were as follows:

Positions Available	POSITIONS FILLED		Total Filled
	Edmonton	Grande Prairie	
Medical Officers	5	-	5
Psychologists	8½	2	10½
Psychiatric Social Workers	9	1	10
Clerical	11	2	13
16	33½	5	38½

In addition, a Psychiatrist, a Psychiatric Trainee, a Psychologist, and two Psychiatric Social Workers were provided to the School Hospital section of the Glenrose Provincial General Hospital.

Professional training grants were provided to two Psychologists and three Psychiatric Social Workers for further professional training at various centres in Canada and it is expected that these persons will return to the service.

SUMMARY OF NEW AND RE-REGISTERED CASES AND WORK LOAD

Clinic Centre	New Cases	Re-Registered	Increase Decrease	Work Load
Athabasca	31	9	+ 3	113
Barrhead, Thorhild, Westlock	38	7	- 10	127
Bonnyville	46	8	- 1	261
Camrose, Killam	32	14	- 8	169
Edmonton	933	452	+216	22,555
Edmonton Rural	209	6	+ 10	110
Edson	61	21	- 17	339
Fort McMurray	44	3	+ 13	178
Holden	10	2	- 1	62
Lac La Biche	22	8	- 22	101
Lamont	6	6	- 24	57
Peace River-Grande Prairie	411	124	+ 24	2,122
Smoky Lake	-	4	- 17	177
St. Paul	20	4	- 16	177
Two Hills	21	13	- 6	181
Vegreville	57	16	- 18	379
Vermilion	44	14	- 9	208
Wainwright	30	12	- 26	183
Wetaskiwin	22	-	- 15	61
Whitehorse, Y.T.	40	3	- 22	94
Yellowknife, N.W.T.	2,084	722	+ 46	27,504

The decrease of patients seen by the travelling Clinics was mainly attributable to a more refined screening process adopted by the referral sources. Six centres, Edson, Lac La Biche, Lamont, St. Paul, Vegreville and Wetaskiwin, accounted for 85% of the decrease. Also, when feasible, centres close to Edmonton were encouraged to use the facilities in Edmonton rather than wait for a travelling Clinic to visit their area.

AGE AND SEX DISTRIBUTION OF NEW CASES

Age	Male	Female	Total	Percentage
0 - 5/11	276	147	423	20.30
6 - 15/11	961	536	1,497	71.83
16 and over	89	75	164	7.87
	1,326	758	2,084	100.00

Ratio of male to female cases 1.74 to 1.

During 1967, the Clinic concentrated on reducing the Clinic's waiting list. To this end a Group Intake system was adopted and it proved most successful. By the end of the year it was possible to revert to individual intakes as the waiting time was reduced to the time necessary to gather reports from sources such as schools, family doctors, et cetera, normally two to three weeks.

ALBERTA GUIDANCE CLINIC, LETHBRIDGE

J. Bower, L.R.C.P., L.R.C.S., L.M., L.A.H., D.P.M., Director

At the beginning of January, 1967, the professional staff consisted of one full-time and one part-time psychologist and two full-time social workers. During the year a final-year medical student worked on the staff for a few

months. Various centres shown in the table below were visited. No visits were made to Brooks in the period covered. There were marriage counselling sessions and vocational testing services and services were continued at the local gaol. The usual amicable relations with other agencies were maintained. The director and senior psychiatric social worker have given talks to professional and lay groups in the district. The director has appeared on television programmes dealing with Mental Health on several occasions.

SUMMARY OF NEW AND RE-REGISTERED CASES AND WORK LOAD

Clinic Centre	New Cases	Re-Registered Cases	Increase or Decrease	Work Load
Cardston	25	5	+ 22	101
Crowsnest Pass	22	9	+ 13	111
Fort Macleod	—	—	— 3	—
Lethbridge	306	207	+ 81	5,014
Medicine Hat	103	79	+ 40	905
Pincher Creek	27	4	+ 23	110
Vulcan	23	24	+ 13	163
Warner	3	—	+ 3	11
TOTALS	509	328	+192	6,415

AGE AND SEX DISTRIBUTION OF NEW CASES

Age	Male	Female	Total	Percentage
0 - 5/11	22	19	41	8.05
6 - 15/11	225	115	340	66.80
16 and over	84	44	128	25.15
TOTALS	331	178	509	100.00

The ratio of male to female cases was 331 to 178 or 1.9 to 1.

ALBERTA GUIDANCE CLINIC, PONOKA

D. L. Phillips, M.D., Spec. Psych., R.C.P.S.(C),

Acting Director

During 1967 Guidance Clinics were again conducted by various members of the staff of the Alberta Hospital, Ponoka, on a part-time basis. The work load was divided as follows: Psychiatrist — 883 interviews; Psychologist — 80 interviews; Social Worker — 6 interviews, with a work load of 969.

Adults and children from Ponoka, Lacombe, Wetaskiwin, Rimbey and other points were seen for consultation and treatment. One doctor devoted one-half day a week to adult out-patients, and other doctors also saw a number of patients, including an increasing number of adolescents. Clinics for children were held at the Wetoka Health Unit. A number of children, adolescents and parents were also seen at the hospital by doctors and psychologists. Discussions were held with teachers and school counsellors.

SUMMARY OF WORK LOAD

New Cases	Re-Registered Cases	Increase	Work Load
201	486	29	969

Although all patients referred were seen for consultation, psychiatrists did not have enough time to offer adequate follow-up treatment. A need for more psychiatric service was evident.

TABLE OF NEW CASES—AGE AND SEX DISTRIBUTION

Age	Male	Female	Total	Percentage
0 - 5/11	—	—	—	—
6 - 15/11	32	22	54	26.90
16 and over	81	66	147	73.10
Total	113	88	201	100.00
Ratio of Male to Female = 113 : 88 = 1.3:1				

During 1967 members of the Guidance Clinic team conducted tours of the hospital for 17 groups and organizations — a total of 424 people — as well as arranging for speakers for each occasion. They also took part in outside discussions on mental health topics or were principal speakers at various meetings in Central Alberta.

ALBERTA GUIDANCE CLINIC, RED DEER

J. B. Haigh, M.B., Ch.B., D.P.M.,

Spec. Psych. C.R.C.P.(C), Director

The staff of the Alberta Guidance Clinic, Red Deer, consisted of a psychiatrist, senior psychologist, junior psychologist who joined the staff in May, social worker, secretary and clerk-typist. The services of a temporary social worker during the summer months was of considerable assistance in coping with the increased number of requests for clinic services.

The work load of the Clinic continued to increase. The undernoted table indicates the number of interviews and psychotherapy sessions held in the Red Deer and out-of-town clinics:

Clinic Centre	New Cases	Re-Registered Cases	Increase or Decrease	Work Load
Olds	6	1	— 4	56
Red Deer	524	169	+12	3,585
Rocky Mtn. Hse.	25	2	+ 9	182
Stettler	19	15	+23	229
Total	574	187	+40	4,052

Two additional clinics were held in Rocky Mountain House because of the additional referrals. A two-day clinic was held in Hobbema at which eighteen children were seen, and arrangements have been made for clinics in Hobbema in 1968. The number of interview hours increased by 288, making a total of 4,052 interviews.

The age and sex distribution of new cases was as indicated below:

Age	Male	Female	Total	Percentage
0 - 5/11	20	18	38	6.62
6 - 15/11	131	76	207	36.06
16 and over	167	162	329	57.32
Total	318	256	574	100.00

The Director visited Deerhome one-half day per week on a consultative basis, and contributed to the training program by lecturing. The Clinic Social Worker and a Psychologist lectured on a twice-weekly basis at Deerhome. Considerable psychological testing was done for the Alberta School Hospital and Deerhome. Requests from individuals for vocational testing and guidance increased, and many tests of this nature were done at the request of the Canada Manpower Centre. Fifty-five patients were seen on a consultative basis at the Red Deer General and Auxiliary Hospitals, eighteen courses of Electro-Convulsant and five courses of Insulin therapy were administered, and thirty-five patients were seen at the Clinic on a continuing basis on referral from the Alberta Hospital, Ponoka.

The Guidance Clinic in Red Deer received referrals from the Juvenile and Family Courts and the Probation Branch, the John Howard Society, Social Service Department of the City, Provincial Welfare Department, Alcoholism Foundation, Family Service Bureau, City and County school divisions, School for the Retarded, Red Deer Health Unit, as well as the various medical clinics and

private physicians in the area.

The increased impetus to Guidance Clinic work in the City of Red Deer was made possible by the addition of a junior psychologist, the services of another social worker during the summer months, and the psychiatrist's encroachment upon his own time in order to accommodate urgent cases.

ACTIVE TREATMENT HOSPITALS

ALBERTA HOSPITALS – EDMONTON AND PONOKA

In 1967 there was a marked difference in the rate of admissions to the two active treatment hospitals.

While there was a marked drop (181) in admissions to the Alberta Hospital, Ponoka, from 1,422 in 1966 to 1,241 in 1967, at the Alberta Hospital, Edmonton, there was an increase of 183 admissions from 2,050 to 2,233, which is an all time high for any hospital in the Division.

Similarly there was a higher rate of voluntary admissions, 60.4% at the Alberta Hospital, Edmonton, than at the Alberta Hospital, Ponoka, (44.62%) as well as a higher number of forensic admissions which were 186 and 59 respectively.

The difference between the activity of the two hospitals is possibly due to the proximity of the Alberta Hospital, Edmonton, to the City of Edmonton and to the enlargement of the out-patient program of the Alberta

Hospital, Ponoka in the City of Calgary.

A study of the Diagnostic Classification of the type of illness on first admission and on readmission emphasizes the seriousness of schizophrenia which represented 17 to 19% of first admissions, and 32 to 37% of readmissions.

At the end of the year, 49.2% of the patients on the books of both hospitals were schizophrenic.

Alcoholism represented 26.4% of first admissions and 25.7% readmissions to the Alberta Hospital, Edmonton.

Both hospitals carried out active programs of treatment in keeping with current concepts and the out-patient programs of both hospitals were enlarged. Halfway houses and foster home programs were well patronized by both hospitals.

The reports of the individual hospitals follow the consolidated statistical tables.

TABLE 2
TOTAL FIRST ADMISSIONS BY DIAGNOSIS
ALBERTA HOSPITAL, EDMONTON
ALBERTA HOSPITAL, PONOKA

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	1	—	1
Syphilis of Central Nervous System	—	—	—
Schizophrenia (All Categories)	187	133	320
Manic Depressive (All Categories)	33	34	67
Involuntal Melancholia	6	15	21
Paranoia and Paranoid States	15	16	31
Senile Psychosis	27	42	69
Pre-Senile Psychosis	6	3	9
Psychosis with Cerebral Arteriosclerosis	75	42	117
Alcoholic Psychosis	28	4	32
Psychosis of Other Demonstrable Etiology..	16	11	27
Other and Unspecified Psychoses	10	10	20
Anxiety Reaction	15	12	27
Hysterical Reaction	—	7	7
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	46	85	131
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	2	2
Other and Unspecified Psychoneurotic Reactions	13	22	35
Pathological Personality (All Categories)...	120	31	151
Immature Personality	39	34	73
Alcoholism Without Psychosis	303	59	362
Other Drug Addiction	2	1	3
Primary Childhood Behaviour Disorders	6	7	13
Mental Deficiency Without Psychosis	23	23	46
Other and Unspecified Disorders of Character, Behaviour and Intelligence ...	20	23	43
Paralysis Agitans	1	—	1
Epilepsy	11	7	18
Puerperal Psychosis	—	7	7
Other Diseases of Brain	2	—	2
Mental Observation Without Need for Psychiatric Care	31	18	49
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	13	14	27
TOTALS	1049	662	1711

TABLE 3
TOTAL READMISSIONS BY DIAGNOSIS
ALBERTA HOSPITAL, EDMONTON
ALBERTA HOSPITAL, PONOKA

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	—	—
Syphilis of Central Nervous System	—	1	1
Schizophrenia (All Categories)	316	273	589
Manic Depressive (All Categories)	60	60	120
Involuntal Melancholia	11	30	41
Paranoia and Paranoid States	15	19	34
Senile Psychosis	7	7	14
Pre-Senile Psychosis	2	1	3
Psychosis with Cerebral Arteriosclerosis	19	4	23
Alcoholic Psychosis	43	13	56
Psychosis of Other Demonstrable Etiology..	17	12	29
Other and Unspecified Psychoses	18	16	34
Anxiety Reaction	12	18	30
Hysterical Reaction	—	9	9
Obsessive-Compulsive Reaction	1	—	1
Neurotic Depressive Reaction	46	50	96
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	10	29	39
Pathological Personality (All Categories)...	82	38	120
Immature Personality	15	25	40
Alcoholism Without Psychosis	325	38	363
Other Drug Addiction	4	1	5
Primary Childhood Behaviour Disorders	5	7	12
Mental Deficiency Without Psychosis	20	16	36
Other and Unspecified Disorders of Character, Behaviour and Intelligence ...	10	17	27
Paralysis Agitans	—	—	—
Epilepsy	15	8	23
Puerperal Psychosis	—	3	3
Other Diseases of Brain	—	1	1
Mental Observation Without Need for Psychiatric Care	7	4	11
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	2	1	3
TOTALS	1062	701	1763

TABLE 4
DIAGNOSIS OF PATIENTS ON BOOKS, DECEMBER 31, 1967
ALBERTA HOSPITAL, EDMONTON
ALBERTA HOSPITAL, PONOKA

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	25	1	26
Syphilis of Central Nervous System	3	—	3
Schizophrenia (All Categories)	793	382	1175
Manic Depressive (All Categories)	52	74	126
Involuntal Melancholia	23	36	59
Paranoia and Paranoid States	50	39	89
Senile Psychosis	48	79	127
Pre-Senile Psychosis	13	13	26
Psychosis with Cerebral Arteriosclerosis	96	70	166
Alcoholic Psychosis	35	10	45
Psychosis of Other Demonstrable Etiology..	59	38	97
Other and Unspecified Psychoses	30	26	56
Anxiety Reaction	8	13	21
Hysterical Reaction	—	2	2
Obsessive-Compulsive Reaction	1	2	3
Neurotic Depressive Reaction	15	16	31
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	9	22	31
Pathological Personality (All Categories)...	32	14	46
Immature Personality	5	9	14
Alcoholism Without Psychosis	69	8	77
Other Drug Addiction	2	—	2
Primary Childhood Behaviour Disorders	2	—	2
Mental Deficiency Without Psychosis	39	22	61
Other and Unspecified Disorders of Character, Behaviour and Intelligence ...	2	7	9
Paralysis Agitans	—	1	1
Epilepsy	16	10	26
Puerperal Psychosis	—	2	2
Other Diseases of Brain	2	—	2
Mental Observation Without Need for Psychiatric Care	13	12	25
Nervousness and Debility	—	1	1
Other Non-Psychiatric Conditions	13	24	37
TOTALS	1455	933	2388

TABLE 5
TABULATED SUMMARY OF DEATHS IN INSTITUTIONS

DISEASE	A. H., Ponoka			A. H., Edmonton			A. H. Claresholm			A. H., Raymond			Rosehaven, Camrose			A. S. H., Red Deer			Deerhome, Red Deer			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Neoplasms malignant	1	-	1	6	4	10	-	1	1	-	1	1	4	-	4	-	-	-	-	1	1	11	7	18
Vascular diseases affecting central nervous system	4	2	6	8	1	9	-	5	5	-	-	-	9	4	13	1	-	1	1	-	23	12	35	
Arteriosclerotic and degenerative heart disease	8	2	10	7	4	11	-	3	3	-	1	1	20	17	37	-	-	-	2	2	4	37	29	66
Other diseases of the heart	13	6	19	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	9	22	
Hydrocephalus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	5	-	-	4	1	5	
Pneumonia	22	10	32	14	10	24	-	2	2	-	-	-	26	9	35	2	1	3	4	4	68	36	104	
Gastritis	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1	1	
Gastrostaxis	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	1	-	1	
Cirrhosis of the liver	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	1	-	1	
Epilepsy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	2	-	-	1	1	2	
Nephritis and nephrosis	-	-	-	1	2	3	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	3	4	
Thyrotoxicosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	-	1	
Septicemia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	1	
Aspiration of vomitus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	3	-	2	1	3	
Senility without mention of psychosis, ill-defined and unknown causes	-	-	-	11	6	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	6	17	
All other diseases classified as infective and parasitic	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	1	1	2	
All other accidents, including burns	-	-	-	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	3	
Suicide and self-inflicted injury, including effects of injuries	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	
Other diseases of muscle, tendon and fascia (congenital myopathy)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
All other diseases	3	3	6	4	3	7	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	1	6	
GRAND TOTALS	51	23	74	53	35	88	1	11	12	-	3	3	60	31	91	11	7	18	9	7	16	185	117	302

Note: Linden House - Unit for Emotionally Disturbed Children - No deaths.

TABLE 6
AGES ON ADMISSION
ALBERTA HOSPITAL, EDMONTON
ALBERTA HOSPITAL, PONOKA

AGES	First Admissions			Re-Admissions			Total			%
	M	F	T	M	F	T	M	F	T	
Under 15 years	9	16	25	1	2	3	10	18	28	.8
15 - 19 years	85	73	158	27	26	53	112	99	211	6.1
20 - 24 years	121	89	210	82	59	141	203	148	351	10.1
25 - 29 years	90	54	144	111	84	195	201	138	339	9.8
30 - 34 years	116	73	189	103	94	197	219	167	386	11.1
35 - 39 years	120	50	170	155	91	246	275	141	416	12.0
40 - 44 years	105	61	166	170	102	272	275	163	438	12.6
45 - 49 years	103	42	145	118	56	174	221	98	319	9.2
50 - 54 years	70	35	105	116	65	181	186	100	286	8.2
55 - 59 years	64	31	95	68	41	109	132	72	204	5.9
60 - 64 years	41	28	69	50	34	84	91	62	153	4.4
65 - 69 years	29	23	52	23	16	39	52	39	91	2.6
70 & over	96	87	183	38	31	69	134	118	252	7.2
TOTAL	1,049	662	1,711	1,062	701	1,763	2,111	1,363	3,474	100.0

ALBERTA HOSPITAL, PONOKA

J. M. Byers, M.Sc., M.D., Spec. Psych. Med. (Alta.)
Cert. M.H.A. (A.P.A.), Medical Superintendent

There were no suicides.

Fifty-eight men and 15 women left the hospital without permission.

PATIENT POPULATION CHANGES

There were 1,029 patients in residence on January 1st, 1967 of whom 691 were male and 338 female. On December 31st, 1967, 960 were in residence of whom 600 were male and 360 female.

ADMISSION OF PATIENTS

Exclusive of patients transferred from other psychiatric facilities, there were 1,241 admissions during the year. Of these 725 were male and 516 female. This represented a decrease of 181 admissions as compared with 1966.

Seventy-two patients were received by transfer from other provincial psychiatric facilities.

Of the patients admitted during the year, 210 were changed from Certificate to voluntary status, and Certificates of Detention were written on 13 patients who had been admitted voluntarily.

SEPARATION OF PATIENTS

One thousand two hundred and eighty patients were discharged, of whom 789 were male and 491 female.

Fifty-eight patients were transferred to other psychiatric facilities in the province.

There were 74 deaths.

Details regarding patient movement are shown in Table 1.

ACCIDENTS AND ELOPEMENTS

Eighteen patients suffered fractures, eight men and ten women. Those with fractures of the femur, of which there were four, were transferred to the Red Deer General Hospital for surgical treatment.

GENERAL HEALTH OF PATIENTS

There were no epidemics during the year and the health of the patients was generally good.

Thirty-seven referrals, 29 men and eight women were made to the Cancer Clinic for diagnosis and treatment.

Four patients were transferred to the Alberta Hospital, Edmonton, for treatment of Pulmonary Tuberculosis.

CLINICAL WORK

Although fewer patients were admitted, there was no appreciable diminution of the clinical work load from the previous year. The use of group therapy as a means of treatment was expanded. Individual psychotherapy, electroshock treatment and drugs were used quite extensively.

The industrial therapy program continued to grow, and on four wards a variety of articles was manufactured under contract from businesses in different parts of the province. Patients doing the work received a nominal remuneration on a piece basis.

Occupational therapy classes were held in the main Occupational Therapy studio as well as in other areas of the hospital. An average of 115 patients attended classes each day.

One hundred and two patients, 96 men and six women were treated in the Alcohol Treatment program.

The physically ill were treated, for the most part, by a group of private Medical Practitioners from the Town of Ponoka. Operative procedures, both emergency and elective, were carried out by this group.

The services of Specialists in various fields of Medicine from Edmonton and Red Deer were used to aid in diagnosis and to carry out special surgical procedures.

The After-Care Clinic operated throughout the year at the Foothills Hospital in Calgary. The work load of this Clinic continued to increase and provided a useful service to patients discharged from this hospital to Calgary and district.

One hundred and twenty-two electroencephalographic tracings were made here, and interpreted by Neurologists at the University of Alberta Hospital, Edmonton.

The Guidance Clinic team from this hospital gave service, when requested, to a limited area in the central part of the province.

One of the physicians at this hospital reserved one afternoon a week in order to see Out-patients. Frequently Out-patients arrived without appointment, and any available physician was called upon to see them so that during the year, all the physicians did some out-patient work.

RECREATIONAL THERAPY

The Recreation Department was kept busy providing recreational activities and entertainment, which throughout the year, involved almost the entire patient population.

Many picnics were held at nearby recreational areas. Chartered bus trips were made to the Alberta Game Farm, the Shrine Circus, Klondike Days Parade and Ice Capades in Edmonton. In addition, many motion pictures were shown and dances and athletic events were held at the hospital.

Under the direction of the Recreation Department, an area of ground on the hospital site was laid out as a park and equipped with various recreational facilities, such as a dance floor, barbecue pit, etc. This park is known as "Centennial Park" and the idea for it was fostered and carried out by members of the Patients' Council. Most of the actual work in preparing the park was done by patients.

RELIGIOUS SERVICES

Members of the Clergy from the Town of Ponoka showed much interest in the welfare of the patients. As well as conducting regular services at the hospital, they made frequent visits to individual patients and took part in conferences and group activities. In addition, quite a number of patients attended Church services in the Town of Ponoka.

SOCIAL SERVICES – SOCIAL WORKERS

The Social Service Department was staffed by six Social Workers, four of whom have B.A. Degrees, and the other two are Registered Psychiatric Nurses.

Three of the Social Workers were located at the After-Care Clinic at the Foothills Hospital in Calgary. This department had an active year, much of the time being spent in after-care visits, in investigating foster homes and assisting in the placement of patients in foster homes.

During the year, 51 patients, 29 women and 22 men were placed in foster homes in Calgary, Red Deer and Ponoka.

Fourteen men were placed in "Roberts House" in

Calgary, and one woman was placed in "Imrie House" in Edmonton.

Fifty-three patients were placed in Nursing Homes and four in Senior Citizens Lodges.

PSYCHOLOGICAL SERVICES – PSYCHOLOGISTS

The senior Psychologist was given leave of absence, as of September 1st, to attend University to work towards her Doctoral Degree. The remainder of the staff, one with an M.A. and four with B.A. qualifications, were kept busy in the administration of psychological tests, taking part in group therapy and lecturing to Student Nurses.

VOLUNTEER SERVICES

Many volunteer groups continued to take an interest in the welfare of the patients.

The Women's Hospital Auxiliary operated the Apparel Shop and provided social activities involving, for the most part, patients on continued treatment wards.

The Canadian Mental Health Association – Calgary Branch sponsored regular bus trips to the hospital, bringing residents of Calgary and district to visit friends and relatives.

A patient-relative Christmas party was held at the hospital in co-operation with the Canadian Mental Health Association – Calgary Branch. Other groups and individuals made many contributions to the welfare and entertainment of the patients.

DENTAL SERVICES

The Dentist who had been on the staff since June 1st, 1960, went on sick leave early in June and did not return to work. He retired on October 4th, 1967. A full-time Dentist was engaged on September 1st.

During the year, over 2,400 dental examinations were made, and in addition, more than 2,300 dental procedures were performed. These consisted of extractions, repairs, fitting dentures, fillings and prophylactic treatments.

X-RAY SERVICES

The two Technicians staffing this department took more than 4,000 X-rays during the year. All chest plates, as usual, were sent to the Baker Memorial Sanatorium in Calgary for interpretation. Other plates were interpreted by Radiological Specialists in Edmonton and Red Deer, when considered necessary.

LABORATORY

The Laboratory was staffed by one Technician and received some assistance from a member of the Medical staff.

More than 10,000 routine laboratory tests were carried out, such as blood counts, urinalyses, and blood chemistry examinations. In addition, the Laboratory was responsible for doing one hundred and twenty-two electrocardiograms and five basal metabolic rates. Three autopsies were performed.

PHARMACY

The work of the Pharmacy increased, due to the growing demand for drugs by former patients. Despite the heavy work load, the Pharmacy operated very efficiently.

MEDICAL EDUCATION

Three members of the Medical staff were in the Psychiatric training program leading to Certification by the Royal College of Physicians and Surgeons.

The Medical staff formed a Journal Club which met once a week to review current articles in the medical periodicals.

Two members of the Medical staff attended the Canadian Psychiatric Association Meeting in Quebec City.

The final year Medical Students from the University of Alberta spent time here in rotation as part of their psychiatric training program.

SCHOOL OF NURSING

The School of Nursing gave instruction to a total of 556 persons, made up as follows:

(1) Four-Year Combined General and Psychiatric Nursing Course	39
(2) Three-Year Psychiatric Nursing Course	54
(3) Post-Basic Course for Registered Nurses	3
(4) Eight-Week Affiliation Course	234
(5) Public Health Students from the University of Saskatchewan	6
(6) Nursing Aides, Ward Aides and Institutional Attendants	220
Nine graduated in the Four-Year General and Psychiatric Nursing Course.	

Seven graduated in the Three-Year Psychiatric Nursing Course.

The Associate Director of Nursing Education was given leave of absence in September to continue her studies leading to a Master's Degree.

The staff of the School of Nursing consisted of the Director of Nursing, the Associate Director of Nursing and 14 Instructors.

The Three-Year Psychiatric Nursing Course was opened to women for the September enrolment. Fifteen of our Ward Aide staff, one Certified Nursing Aide and one Recreational Therapist Assistant transferred to the Course.

NURSING SERVICES

The standard of nursing care remained at a high level, and the patients responded favourably to the nursing care they received.

Members of the Nursing staff took advantage of furthering their education by attendance at Workshops and Seminars.

Forty-nine members of the Nursing staff attended "The Program to Develop Management Skills", which was presented by the Training Co-ordinator, Personnel Administration Office of the Government of Alberta.

In-service education programs were carried on throughout the year.

The immunization and tuberculosis control program started in 1966 continued to function well.

VISITORS TO THE HOSPITAL

The Director and Assistant Director of the Division of Mental Health were frequent visitors. The Honourable the Minister of Health visited on several occasions.

The Board of Visitors appointed to visit the Alberta Hospitals came in October.

Many groups of visitors who came to the hospital, were entertained by talks given by one or more members of the staff, and were taken on tours of the buildings.

THE EUGENICS BOARD OF ALBERTA

The Eugenics Board held one meeting at this hospital. Two female patients were presented. One was passed with the consent of the patient and one was deferred. One operation for sterilization was performed on a male who had been passed by The Eugenics Board in the previous year.

REVIEW PANEL

The Review Panel held eight meetings at the hospital and dealt with a total of 30 complaints from 28 patients — 13 men and 15 women. The Review Panel decided that the issuance of the certificates was warranted in all cases but that three should now be revoked. Two patients complained twice on separate certificates.

SURGICAL SERVICES

A total of 95 operations — 26 major and 69 minor — were performed at this hospital, during the year by Surgeons from Ponoka, Red Deer and Edmonton. In addition, a few patients were transferred to Red Deer and Edmonton for special surgical procedures.

HOUSEKEEPING DEPARTMENT

This department continued to function efficiently keeping the interior of the buildings clean and attractive.

DIETARY DEPARTMENT

This department continued to give good food service to the patients and staff who have their meals at the hospital. Pre-planned menus permitted a better system of ordering food supplies. A greater variety and larger quantity of vegetables were available from the gardens.

FIRE PROTECTION

Regular fire practices were held. The buildings and fire fighting equipment were inspected regularly.

The Fire Department responded to eight alarms, five of which were false; of the three fires which did occur, only one was of a serious nature and this resulted in the total

TABLE 2
ALBERTA HOSPITAL, PONOKA
FIRST ADMISSIONS BY DIAGNOSIS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	1	—	1
Syphilis of Central Nervous System	—	—	—
Schizophrenia (All Categories)	66	45	111
Manic Depressive (All Categories)	11	6	17
Involuntional Melancholia	3	5	8
Paranoia and Paranoid States	11	10	21
Senile Psychosis	16	20	36
Pre-Senile Psychosis	4	2	6
Psychosis with Cerebral Arteriosclerosis	26	23	49
Alcoholic Psychosis	22	3	25
Psychosis of Other Demonstrable Etiology	11	6	17
Other and Unspecified Psychoses	2	6	8
Anxiety Reaction	4	8	12
Hysterical Reaction	—	2	2
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	16	56	72
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	9	7	16
Pathological Personality (All Categories)	56	15	71
Immature Personality	14	21	35
Alcoholism Without Psychosis	78	10	88
Other Drug Addiction	1	—	1
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	11	6	17
Other and Unspecified Disorders of Character, Behaviour and Intelligence	7	14	21
Paralysis Agitans	—	—	—
Epilepsy	4	3	7
Puerperal Psychosis	—	2	2
Other Diseases of Brain	—	—	—
Mental Observation Without Need for Psychiatric Care	4	—	4
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	—	—	—
TOTALS	377	270	647

TABLE 3
ALBERTA HOSPITAL, PONOKA
READMISSIONS BY DIAGNOSIS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	—	—
Syphilis of Central Nervous System	—	—	—
Schizophrenia (All Categories)	124	95	219
Manic Depressive (All Categories)	31	17	48
Involuntional Melancholia	3	12	15
Paranoia and Paranoid States	5	11	16
Senile Psychosis	3	2	5
Pre-Senile Psychosis	—	—	—
Psychosis with Cerebral Arteriosclerosis	5	1	6
Alcoholic Psychosis	22	6	28
Psychosis of Other Demonstrable Etiology	7	6	13
Other and Unspecified Psychoses	7	7	14
Anxiety Reaction	8	7	15
Hysterical Reaction	—	3	3
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	19	23	42
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	4	15	19
Pathological Personality (All Categories)	28	10	38
Immature Personality	6	12	18
Alcoholism Without Psychosis	57	5	62
Other Drug Addiction	2	1	3
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	8	5	13
Other and Unspecified Disorders of Character, Behaviour and Intelligence	4	4	8
Paralysis Agitans	—	—	—
Epilepsy	4	3	7
Puerperal Psychosis	—	1	1
Other Diseases of Brain	—	—	—
Mental Observation Without Need for Psychiatric Care	1	—	1
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	—	—	—
TOTALS	348	246	594

TABLE 4
ALBERTA HOSPITAL, PONOKA
DIAGNOSIS OF PATIENTS ON BOOKS, DECEMBER 31, 1967

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	20	—	20
Syphilis of Central Nervous System	2	—	2
Schizophrenia (All Categories)	350	177	527
Manic Depressive (All Categories)	31	25	56
Involuntional Melancholia	10	10	20
Paranoia and Paranoid States	27	26	53
Senile Psychosis	16	31	47
Pre-Senile Psychosis	6	5	11
Psychosis with Cerebral Arteriosclerosis	28	24	52
Alcoholic Psychosis	21	4	25
Psychosis of Other Demonstrable Etiology	27	20	47
Other and Unspecified Psychoses	21	13	34
Anxiety Reaction	5	8	13
Hysterical Reaction	—	1	1
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	7	10	17
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	3	8	11
Pathological Personality (All Categories)	11	7	18
Immature Personality	3	4	7
Alcoholism Without Psychosis	17	4	21
Other Drug Addiction	1	—	1
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	15	5	20
Other and Unspecified Disorders of Character, Behaviour and Intelligence	2	5	7
Paralysis Agitans	—	—	—
Epilepsy	6	4	10
Puerperal Psychosis	—	2	2
Other Diseases of Brain	—	—	—
Mental Observation Without Need for Psychiatric Care	3	—	3
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	1	1	2
TOTALS	633	394	1027

DEPARTMENT OF HEALTH

TABLE 5
ALBERTA HOSPITAL, PONOKA
AGE OF PATIENTS ON ADMISSION

AGES	FIRST ADMISSIONS			READMISSIONS			TRANSFERS			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 15 years	3	4	7	1	—	1	—	—	—	4	4	8
15 to 19 years	35	31	66	14	6	20	1	4	5	50	41	91
20 to 24 years	54	34	88	25	16	41	3	—	3	82	50	132
25 to 29 years	35	22	57	46	22	68	—	1	1	81	45	126
30 to 34 years	39	25	64	40	24	64	—	—	—	79	49	128
35 to 39 years	37	21	58	43	26	69	1	2	3	81	49	130
40 to 44 years	32	18	50	38	40	78	—	3	3	67	71	138
45 to 49 years	32	13	45	36	27	63	3	5	8	71	45	116
50 to 54 years	26	19	45	40	21	61	3	6	9	69	46	115
55 to 59 years	23	12	35	23	23	46	1	9	10	47	44	91
60 to 64 years	12	14	26	17	22	39	4	9	13	33	45	78
65 to 69 years	11	10	21	13	7	20	7	3	10	31	20	51
70 and over	41	37	78	12	12	24	5	2	7	58	51	109
TOTAL	377	270	647	348	246	594	28	44	72	753	560	1313

TABLE 6
ALBERTA HOSPITAL, PONOKA
DISCHARGES BY DIAGNOSIS AND CONDITION ON DISCHARGE

DIAGNOSIS	Recovered			Much Improved			Improved			Unchanged or Unimproved			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
General paralysis of the insane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis of central nervous system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Schizophrenia (all categories)	58	36	94	71	76	147	97	32	129	12	4	16	238	148	386
Manic depressive (all categories)	19	18	37	10	3	13	12	6	18	2	-	2	43	27	70
Involuntional melancholia	2	5	7	2	9	11	1	3	4	-	-	-	5	17	22
Paranoia and paranoid states	-	-	-	6	12	18	15	11	26	2	1	3	23	24	47
Senile psychosis	-	-	-	-	1	1	7	3	10	3	4	7	10	8	18
Pre-senile psychosis	-	-	-	-	1	1	1	-	1	1	1	2	2	2	4
Psychosis with cerebral arteriosclerosis	-	-	-	-	1	1	14	3	17	1	1	2	15	5	20
Alcoholic psychosis	37	9	46	1	1	2	3	1	4	-	-	-	41	11	52
Psychosis of other demonstrable etiology	2	4	6	4	4	8	10	4	14	1	-	1	17	12	29
Other and unspecified psychoses	5	3	8	4	6	10	1	4	5	-	3	3	10	16	26
Anxiety reaction	3	2	5	4	1	5	5	8	13	-	1	1	12	12	24
Hysterical reaction	-	2	2	-	1	1	-	1	1	-	-	-	-	4	4
Obsessive-compulsive reaction	-	-	-	2	-	2	-	-	-	-	-	-	2	-	2
Neurotic depressive reaction	10	24	34	3	29	32	21	19	40	3	3	6	37	75	112
Psychoneurosis with somatic symptoms (somatization reaction) affecting circulatory system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and unspecified psychoneurotic reactions	-	1	1	1	11	12	11	7	18	1	3	4	13	22	35
Pathological personality (all categories)	-	-	-	-	-	-	-	-	-	94	26	120	94	26	120
Immature personality	-	-	-	-	-	-	-	-	-	20	36	56	20	36	56
Alcoholism without psychosis	-	-	-	-	-	-	-	-	-	156	12	168	156	12	168
Other drug addiction	-	-	-	-	-	-	-	-	-	2	1	3	2	1	3
Primary childhood behaviour disorders	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mental deficiency without psychosis	-	-	-	-	-	-	-	-	-	13	11	24	13	11	24
Other and unspecified disorders of character, behaviour and intelligence	-	-	-	-	-	-	-	-	-	16	14	30	16	14	30
Paralysis agitans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epilepsy	-	-	-	-	-	-	-	-	-	11	6	17	11	6	17
Puerperal psychosis	-	-	-	-	-	-	-	-	-	-	2	2	-	2	2
Other diseases of brain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mental observation without need for psychiatric care	-	-	-	-	-	-	-	-	-	9	-	9	9	-	9
Nervousness and debility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other non-psychiatric conditions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	136	104	240	108	156	264	198	102	300	347	129	476	789	491	1,280

TABLE 7
ALBERTA HOSPITAL, PONOKA
DISCHARGES SHOWING DURATION OF RESIDENCE IN HOSPITAL

[illegible]

TABLE 8
ALBERTA HOSPITAL, PONOKA
CAUSES OF DEATH

CLASSIFICATION	Male	Female	Totals
Malignant Neoplasms	1	—	1
Vascular Lesions Affecting C.N.S.	4	2	6
Arteriosclerotic and Degenerative Heart Disease	8	2	10
Other Diseases of the Heart	13	6	19
Pneumonia	22	10	32
All other Diseases	3	3	6
TOTALS	51	23	74

TABLE 9
ALBERTA HOSPITAL, PONOKA
DEATHS BY DIAGNOSIS

	Male	Female	Totals
General Paresis	1	—	1
Schizophrenia	9	1	10
Manic Depressive	1	1	2
Involuntal Psychosis	2	—	2
Paranoid Conditions	3	1	4
Senile Psychosis	14	6	20
Pre-senile Psychosis	—	1	1
Psychosis with Cerebral Arteriosclerosis ...	12	10	22
Alcoholic Psychosis	1	—	1
Psychosis of Other Demonstrable Etiology..	4	2	6
Reactive Depression	1	—	1
Pathological Personality	1	—	1
Alcoholism without Psychosis	2	—	2
Mental Deficiency	—	1	1
TOTALS	51	23	74

ALBERTA HOSPITAL, EDMONTON
J. L. Paterson, M.D., Spec. Psych., R.C.P.S. (C),
Medical Superintendent

PATIENT POPULATION CHANGES

On December 31, 1966, there were in residence 881 men and 589 women patients, a total of 1,470. The number in residence December 31, 1967, was 707 men and 434 women, a total of 1,141. There were 220 patients on leave or otherwise absent compared to 217 on leave or otherwise absent in 1966. The total patient population in residence and on leave or otherwise absent on December 31, 1967, was 1,361. This was a decrease of 109 from the previous year.

During the year the following changes were made in the Modes of Admission: 15 patients, admitted voluntarily, had to be certified; and 252 patients, admitted by Medical Certificates, signed Voluntary Forms.

ADMISSION OF PATIENTS

During the year 1,386 men and 847 women were admitted, for a total of 2,233. In addition, 17 men and nine women were transferred from different mental institutions in the Province, making a total of 1,403 men and 856 women admitted. A combined total of 2,259 patients were admitted during the year representing an increase of seven percent over the preceding year. One thousand three hundred and forty-nine admissions were by Voluntary application, 604 were by Medical Certificates, 80 were under Section 8 of The Mental Health Act, 128 were on Remand, 55 were admitted on transfer from Fort Saskatchewan Gaol, 6 were under Warrant from the Northwest Territories, five were under The Indian Act, and six were under The Tuberculosis Act. Two hundred and four admissions were in the Geriatric group.

SEPARATION OF PATIENTS

During the year 1,343 men and 806 women, a total of 2,149 were discharged. This was an increase of 295 over the previous year. In addition 66 men and 65 women, a total of 131 were transferred to other mental institutions. There were 88 deaths. Twenty-three autopsies were performed. The total number of separations was 2,368. Details regarding patient movement are shown in Table 1.

REVIEW PANEL

The Review Panel held 13 meetings at the hospital and dealt with a total of 22 complaints from 21 patients — nine men and 12 women. The Review Panel decided in one case that the certificates should not have been issued and in four cases decided that the issuance of the certificates was warranted but should now be revoked. One patient complained twice on separate certificates.

GENERAL HEALTH

The health of the patients was generally good during the year and there were no epidemics. T.A.B.T. Immunization was carried out on all admissions and new staff. Chest X-Rays were done on all new staff plus a complete re-survey of all patients and staff.

CLINICAL WORK

There was a marked increase in the number of admissions and readmissions this year and this put a very heavy clinical work load on the medical, nursing and ancillary staff. The main forms of therapy continued to be Drugs, Individual and Group Therapy, and Electro-Convulsive Therapy with emphasis on Psychotherapy.

The number of alcoholic patients showed a marked rise this year and in order to cope with this situation a treatment team was initiated on one of the wards where the majority of alcoholics were admitted. The program involved Group Therapy and was of one-month's duration. Alcoholics Anonymous and Al-Anon groups continued to hold regular meetings.

Occupational Therapy continued to play an important role. The vacancy for a qualified occupational therapist was filled.

The Medical Staff provided both psychiatric treatment and treatment for physical illnesses. Specialists in various areas were called in from Edmonton as required and on occasion patients were examined in the City or placed in one of the general hospitals.

The private psychiatrists in the City were contacted with a view to joining the hospital staff on a sessional basis. Two private psychiatrists are now attached to the hospital, one five mornings a week and the other two mornings a week. It is hoped that this service will be expanded during the coming year.

The Out-Patient Service continued to expand and consisted largely of discharged patients. In addition to those seen by the Medical Staff, a large number was also seen by the Social Workers.

Continued use was made of the Cancer Clinic for

diagnosis and treatment and a number of patients were transferred from the Alberta Hospital, Ponoka; Rosehaven, Camrose; and Deerhome, Red Deer to this hospital for attendance at the Cancer Clinic and for continued treatment.

Treatment of tuberculosis continued to be successful. All patients in the Division of Mental Health institutions infected with tuberculosis were treated in this hospital. At the end of the year there were 90 patients, 45 men and 45 women, of whom 26 were considered active.

OCCUPATIONAL THERAPY

Occupational Therapy continued to function not only in the main Occupational Therapy Department, but also on the wards. Continued expansion occurred throughout the year, particularly in the ward areas. Industrial Therapy functioned well and served as a means of remuneration to the patients. The Crescendo Tea Room employed patients and it was operated by them on a profit-sharing basis. This area proved very successful and expanded its services during the year. A qualified occupational therapist was taken on staff this year and has been in charge of the Occupational Therapy Department.

SOCIAL SERVICES

At December 31, 1967, there were six social workers and two psychiatric nurses on staff in this Department.

Expansion of services continued throughout the year with the Foster Home Program functioning well. There were 174 home placements, 147 home investigations, 5,673 patient interviews and 1,429 referrals. The Family Care Program involving Imrie House resulted in 17 placements and of this total three had to be readmitted to the Alberta Hospital, Edmonton.

DEPARTMENT OF PSYCHOLOGY

Administration of psychological tests was carried out on as many patients as possible including all referrals. During the year there were 700 patients who received psychological tests. This Department was also active in Group Therapy programs, teaching, and giving lectures to outside organizations.

RECREATIONAL PROGRAM

This Department covered all wards and presented a constantly varying program of evening activities for the patients. The Recreational Program involved all types of indoor and outdoor activity. The Department of Veterans Affairs continued to assist throughout the year by providing entertainment and tickets to recreational activities in Edmonton. The Women's Auxiliary of the Canadian Legion also contributed by providing entertainment.

RELIGIOUS SERVICES

Anglican, Lutheran, Roman Catholic, and United Church services were provided regularly throughout the year. Clergy from various denominations visited at frequent

intervals. The Jewish and Ukrainian Women's Organizations visited regularly. Clergy of all faiths were available and were called when requested.

LIBRARY

Three libraries were in operation — Medical, Nursing, and Recreational (Patient). The Recreational Therapy Department provided a travelling library which periodically visited all the wards.

BEAUTY PARLOR

This Department continued to be very active and was utilized to capacity.

DENTAL SERVICES

There were 2,398 patients examined during the year. All new admissions were examined and a variety of types of treatment were carried out, namely extractions, fillings, and denture work, constituting a total of 3,435 dental procedures.

X-RAY SERVICES

During the year 5,848 patients were X-rayed and this included a variety of types of X-Ray examinations. All patients and staff had a yearly chest X-Ray. In addition 482 tuberculin tests were carried out and T.A.B.T. Vaccine was given to 107 new staff. The increasing number of admissions provided much added work for this Department.

LABORATORY SERVICES

There were 33,929 separate examinations done with a unit value of 57,000. These included 4,049 tests which were sent out. This Department also assisted in the training program given to technicians from the school operated by the Department of Health. In addition to regular working hours, technicians were on call on a twenty-four hour basis and were called whenever required. Laboratory examinations were of a great variety including biochemistry. The Provincial Laboratory was used for certain examinations.

SURGICAL SERVICES

There were 61 major operations, 52 minor operations, 82 other procedures and three application of casts. Most of the surgical work was done by surgeons from Edmonton and was carried out in this hospital. In some cases the surgical services were provided in a general hospital in the City.

ELECTROENCEPHALOGRAPH

There were 411 E.E.G.'s, 184 E.C.G.'s and 15 Diathermies done during the year.

EUGENICS BOARD

The Eugenics Board held four meetings at this hospital. A total of 35 cases was presented to the Board. Sixteen of these were first examined at an Alberta

Guidance Clinic. A total of 37 operations was performed.

SCHOOL OF NURSING

There were 12 instructional staff including the In-Service Educational Instructress and the Assistant Director of Nursing.

A total of 21 students, 15 women and six men, completed the three-year course in Psychiatric Nursing. At the end of the year there were 103 students divided as follows: 44 first-year students, 32 second-year students and 27 third-year students.

The Affiliation Program for student nurses from five general hospitals was continued. A total of 221 students was given an eight-week course in Psychiatric Nursing throughout the year. The average number of students in attendance on each course was 44. These affiliation students came from the Edmonton General Hospital, Misericordia Hospital, Royal Alexandra Hospital, St. Joseph's General Hospital, Vegreville, and the Archer Memorial Hospital, Lamont.

A refresher course for psychiatric nurse graduates was held. A supervisory training program was given to four groups of nurses and other personnel by the Personnel Administration Officer from Central Personnel. A course in Personnel Administration was given to senior personnel.

A two-day workshop for instructors from the five General Hospital Schools of Nursing was held during the year.

NURSING SERVICE

Nursing Service continued to operate efficiently with increased integration of male and female staff. Group Therapy Programs involving all levels of ward staff were carried out. Remotivation continued to expand. In-Service Education was provided throughout the year. Additional orientation of new staff was provided.

FIRE PROTECTION

Regular fire practices were held and instructions were given throughout the hospital to all new staff. The fire equipment was inspected and was kept at a peak of efficiency.

HOUSEKEEPING

This Department continued to function efficiently. The wards were kept comfortable and attractive.

LAUNDRY, TAILOR AND SEWING SHOP

Although the laundry was very busy due to the heavy patient load, the work was done efficiently. A total of over 2,000,000 pounds of laundry was done. The sewing and tailoring work continued under the direction of the laundry.

DIETARY DEPARTMENT

On December 1, 1967, Versafood Services Ltd. took over the entire food service operation of the hospital including the staff. There has been increased variety in food

provided and the quality has also improved as a result of this operation. In addition to the large number of ordinary meals provided to staff and patients with a daily average population of approximately 2,000, a large number of special diets was required.

FORENSIC MEDICINE

There were 128 remands during the year. Various members of the Medical Staff appeared in Court in connection with this work. In addition there was continuation of the consultation work at Fort Saskatchewan Gaol.

BUSINESS OFFICE

The work of the Business Office continued to expand due to the increased number of admissions and discharges throughout the year. The Business Office carried out its usual duties efficiently and in close liaison with the other hospital departments.

MEDICAL RECORDS

The work of the Department continued to increase due to the increased number of admissions and discharges.

GARDENS AND GROUNDS

The production of the gardens and grounds was very good and there was a vegetable surplus which was utilized at other hospitals within the Department.

NEW BUILDINGS

An addition to the Administration Building was completed and the Out-Patient Department and additional office space was placed in this addition. Renovations on No. 2 Building were completed and it was initially occupied by male patients until transfers to the Alberta Hospital, Claresholm and the Alberta Hospital, Ponoka were completed. Female patients now occupy the entire building which has an open-door policy throughout. The Farm Dormitory was vacated and is to be demolished.

VISITING AND VOLUNTEER PROGRAMS

The following volunteer groups were very active throughout the year: The Canadian Mental Health Association provided the Christmas Bazaar in which gifts were supplied for patients to send to their families and relatives. The attendance at the Bazaar was over 600. Members of the volunteer groups carried out regular programs with patients on a number of wards. The White Cross Centre continued to play an active role with pre-discharged and discharged patients. The Lloydminster Branch of the Canadian Mental Health Association supplied money to take groups of patients to various activities in the Edmonton area. The following Church groups were active in visiting at regular intervals throughout the year: United Church Deaconess and Volunteers, Roman Catholic Women, Reorganized Church of Latter Day Saints, Beth Israel Synagogue, Jasper Place Young Peoples, and Ukrainian Ladies Benevolent

Society. Other groups included the Julliard Modelling Club, Montgomery Ladies Auxiliary, Canadian Legion, Strathcona Ladies Auxiliary and the Moose Lodge. Nursing administration provided orientation seminars for the visitors. There was an average of 22 visiting groups per month.

The Open House Program continued with visiting days arranged by each ward at which time friends and relatives could come and enjoy lunch prepared and served by the patients. Visitors were encouraged to go through all parts of the wards.

Frequent groups of visitors such as school and church groups were taken through the hospital and in addition to the visit a discussion group was held in order to provide information and answer questions. These groups were conducted by members of the Nursing, Social Service and Psychology Staff.

During the Christmas and New Year's Season the patients were encouraged to visit their homes and relatives, and sight-seeing tours throughout the City were arranged.

VISITORS

Dr. P. B. Rose, Deputy Minister of Health, visited and inspected the hospital. The Director and Assistant Director of Mental Health were frequent visitors. The Board of

Visitors carried out its annual inspection.

PUBLIC WORKS

Maintenance Department: This Department continued to function well.

Mechanical Branch: This Department operated efficiently throughout the year.

CONCLUSION

Another year of increased admissions continued to tax the facilities to the limit. The discharge rate remained high so that the total population diminished. The number of voluntary admissions increased and were largely made up of non-psychotic disorders such as alcoholics, neurotics and character disorders. The Review Panel functioned well and provided a chance for patients and relatives to appeal to an independent body. Cordial relations continued to exist between the hospital and the Department of Health.

We wish to conclude by expressing our appreciation to the Minister of Health, Deputy Minister of Health, Director and Assistant Director of the Division of Mental Health, as well as to other personnel in the Health Department.

TABLE 1
ALBERTA HOSPITAL, EDMONTON
MOVEMENT OF PATIENT POPULATION

							Male	Female	Total
Patients on Books at December 31, 1966							881	589	1470
ADMISSIONS	M	F	T	M	F	T			
First Admissions:									
Section 5	335	195	530						
Section 6	114	121	235						
Section 7	88	47	135						
Section 8	34	7	41						
Section 9(1)(a)	—	—	—						
Section 9(1)(b)	76	12	88						
Section 9a	21	—	21						
Warrant NWT	2	2	4						
Indian Act	2	2	4						
Warrant TB	—	6	6						
				672	392	1064			
Re-Admissions:									
Section 5	514	305	819						
Section 6	38	65	103						
Section 7	75	56	131						
Section 8	27	12	39						
Section 9(1)(a)	—	—	—						
Section 9(1)(b)	27	13	40						
Section 9a	31	3	34						
Warrant NWT	2	—	2						
Indian Act	—	1	1						
Warrant TB	—	—	—						
				714	455	1169			
Transfers In:				17	9	26	1403	856	2259
							2284	1445	3729
SEPARATIONS									
Discharges:									
As recovered	4	13	17						
As much improved	31	60	91						
As improved	1101	582	1683						
As unchanged	186	139	325						
As not Psychotic	21	12	33						
				1343	806	2149			
Deaths:				53	35	88			
Transfers Out:				66	65	131	1462	906	2368
							822	539	1361
On the Books December 31, 1967							822	539	1361
In Residence December 31, 1967							707	434	1141
On Leave or Otherwise Absent							115	105	220

DEPARTMENT OF HEALTH

TABLE 2
ALBERTA HOSPITAL, EDMONTON
FIRST ADMISSIONS BY DIAGNOSIS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	—	—
Syphilis of Central Nervous System	—	—	—
Schizophrenia (All Categories)	121	88	209
Manic Depressive (All Categories)	22	28	50
Involuntary Melancholia	3	10	13
Paranoia and Paranoid States	4	6	10
Senile Psychosis	11	22	33
Pre-Senile Psychosis	2	1	3
Psychosis with Cerebral Arteriosclerosis	49	19	68
Alcoholic Psychosis	6	1	7
Psychosis of Other Demonstrable Etiology..	5	5	10
Other and Unspecified Psychoses	8	4	12
Anxiety Reaction	11	4	15
Hysterical Reaction	—	5	5
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	30	29	59
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting			
Circulatory System	—	2	2
Other and Unspecified Psychoneurotic			
Reactions	4	15	19
Pathological Personality (All Categories)....	64	16	80
Immature Personality	25	13	38
Alcoholism Without Psychosis	225	49	274
Other Drug Addiction	1	1	2
Primary Childhood Behaviour Disorders.....	6	7	13
Mental Deficiency Without Psychosis	12	17	29
Other and Unspecified Disorders of			
Character, Behaviour and Intelligence ...	13	9	22
Paralysis Agitans	1	1	2
Epilepsy	7	4	11
Puerperal Psychosis	—	5	5
Other Diseases of Brain	2	—	2
Mental Observation Without Need for			
Psychiatric Care	27	18	45
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	13	14	27
TOTALS	672	392	1064

TABLE 3
ALBERTA HOSPITAL, EDMONTON
READMISSIONS BY DIAGNOSIS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	—	—
Syphilis of Central Nervous System	—	1	1
Schizophrenia (All Categories)	192	178	370
Manic Depressive (All Categories)	29	43	72
Involuntary Melancholia	8	18	26
Paranoia and Paranoid States	10	8	18
Senile Psychosis	4	5	9
Pre-Senile Psychosis	2	1	3
Psychosis with Cerebral Arteriosclerosis	14	3	17
Alcoholic Psychosis	21	7	28
Psychosis of Other Demonstrable Etiology..	10	6	16
Other and Unspecified Psychoses	11	9	20
Anxiety Reaction	4	11	15
Hysterical Reaction	—	6	6
Obsessive-Compulsive Reaction	1	—	1
Neurotic Depressive Reaction	27	27	54
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting			
Circulatory System	—	—	—
Other and Unspecified Psychoneurotic			
Reactions	6	14	20
Pathological Personality (All Categories)....	54	28	82
Immature Personality	9	13	22
Alcoholism Without Psychosis	268	33	301
Other Drug Addiction	2	—	2
Primary Childhood Behaviour Disorders	5	7	12
Mental Deficiency Without Psychosis	12	11	23
Other and Unspecified Disorders of			
Character, Behaviour and Intelligence ...	6	13	19
Paralysis Agitans	—	—	—
Epilepsy	11	5	16
Puerperal Psychosis	—	2	2
Other Diseases of Brain	—	1	1
Mental Observation Without Need for			
Psychiatric Care	6	4	10
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	2	1	3
TOTALS	714	455	1169

TABLE 4
ALBERTA HOSPITAL, EDMONTON
DIAGNOSIS OF PATIENTS ON BOOKS, DECEMBER 31, 1967

Diagnosis Classification	Male	Female	Total
General Paralysis of the Insane	5	1	6
Syphilis of Central Nervous System	1	—	1
Schizophrenia (All Categories)	443	205	648
Manic Depressive (All Categories)	21	49	70
Involuntary Melancholia	13	26	39
Paranoia and Paranoid States	23	13	36
Senile Psychosis	32	48	80
Pre-Senile Psychosis	7	8	15
Psychosis with Cerebral Arteriosclerosis	68	46	114
Alcoholic Psychosis	14	6	20
Psychosis of Other Demonstrable Etiology..	32	18	50
Other and Unspecified Psychoses	9	13	22
Anxiety Reaction	3	5	8
Hysterical Reaction	—	1	1
Obsessive-Compulsive Reaction	1	2	3
Neurotic Depressive Reaction	8	6	14
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting			
Circulatory System	—	—	—
Other and Unspecified Psychoneurotic			
Reactions	6	14	20
Pathological Personality (All Categories)....	21	7	28
Immature Personality	2	5	7
Alcoholism Without Psychosis	52	4	56
Other Drug Addiction	1	—	1
Primary Childhood Behaviour Disorders	2	—	2
Mental Deficiency Without Psychosis	24	17	41
Other and Unspecified Disorders of			
Character, Behaviour and Intelligence ...	—	2	2
Paralysis Agitans	—	1	1
Epilepsy	10	6	16
Puerperal Psychosis	—	—	—
Other Diseases of Brain	2	—	2
Mental Observation Without Need for			
Psychiatric Care	10	12	22
Nervousness and Debility	—	1	1
Other Non-Psychiatric Conditions	12	23	35
TOTAL	822	539	1361

TABLE 5
ALBERTA HOSPITAL, EDMONTON
AGE OF PATIENTS ON ADMISSION

AGES	FIRST ADMISSIONS			READMISSIONS			TRANSFERS			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T
Under 15 years	6	12	18	—	2	2	—	—	—	6	14	20
15 to 19 years	50	42	92	13	20	33	—	—	—	63	62	125
20 to 24 years	67	55	122	57	43	100	1	—	1	125	98	223
25 to 29 years	55	32	87	65	62	127	1	1	2	121	95	216
30 to 34 years	77	48	125	63	70	133	2	1	3	142	119	261
35 to 39 years	83	29	112	112	65	177	—	—	—	195	94	289
40 to 44 years	76	33	109	132	62	194	1	—	1	209	95	304
45 to 49 years	71	29	100	82	29	111	1	2	3	154	60	214
50 to 54 years	44	16	60	76	44	120	—	3	3	120	63	183
55 to 59 years	41	19	60	45	18	63	2	1	3	88	38	126
60 to 64 years	29	14	43	33	12	45	2	—	2	64	26	90
65 to 69 years	18	13	31	10	9	19	2	1	3	30	23	53
70 and over	55	50	105	26	19	45	5	—	5	86	69	155
TOTAL	672	392	1064	714	455	1169	17	9	26	1403	856	2259

TABLE 6
ALBERTA HOSPITAL, EDMONTON
DISCHARGES BY DIAGNOSIS AND CONDITION ON DISCHARGE

DIAGNOSIS	Recovered			Much Improved			Improved			Unchanged or Unimproved			Total		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
General paralysis of the insane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis of central nervous system	-	-	-	-	-	-	-	1	1	-	-	-	-	1	1
Schizophrenia (all categories)	-	6	6	19	37	56	257	208	465	39	22	61	315	273	588
Manic depressive (all categories)	-	2	2	5	4	9	41	56	97	4	5	9	50	67	117
Involuntional melancholia	-	1	1	-	3	3	7	19	26	-	3	3	7	26	33
Paranoia and paranoid states	-	-	-	-	-	-	12	11	23	-	1	1	12	12	24
Senile psychosis	-	-	-	-	-	-	4	6	10	8	7	15	12	13	25
Pre-senile psychosis	-	-	-	1	-	1	2	2	4	-	-	-	3	2	5
Psychosis with cerebral arteriosclerosis	1	-	1	1	-	1	13	5	18	21	1	22	36	6	42
Alcoholic psychosis	2	-	2	1	2	3	24	3	27	-	1	1	27	6	33
Psychosis of other demonstrable etiology	-	-	-	-	2	2	10	5	15	1	1	2	11	8	19
Other and unspecified psychoses	-	-	-	2	1	3	10	8	18	3	6	9	15	15	30
Anxiety reaction	-	-	-	-	1	1	13	12	25	1	2	3	14	15	29
Hysterical reaction	-	-	-	-	-	-	1	5	6	-	4	4	1	9	10
Obsessive-compulsive reaction	-	-	-	-	-	-	1	-	1	-	-	-	1	-	1
Neurotic depressive reaction	1	-	1	1	2	3	53	48	101	5	17	22	60	67	127
Psychoneurosis with somatic (somatization reaction) affecting circulatory system	-	-	-	-	-	-	-	1	1	-	1	1	-	2	2
Other and unspecified psychoneurotic reactions	-	1	1	1	-	1	10	20	30	-	2	2	11	23	34
Pathological personality (all categories)	-	1	1	-	1	1	96	31	127	26	15	41	122	48	170
Immature personality	-	1	1	-	-	-	22	16	38	12	7	19	34	24	58
Alcoholism without psychosis	-	-	-	-	2	2	477	75	552	23	7	30	500	84	584
Other drug addiction	-	1	1	-	-	-	1	-	1	1	-	1	2	1	3
Primary childhood behaviour disorders	-	-	-	-	1	1	8	11	19	5	2	7	13	14	27
Mental deficiency without psychosis	-	-	-	-	-	-	2	11	13	17	21	38	19	32	51
Other and unspecified disorders of character, behaviour and intelligence	-	-	-	-	1	1	17	15	32	8	10	18	25	26	51
Paralysis agitans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epilepsy	-	-	-	-	-	-	8	6	14	4	2	6	12	8	20
Puerperal psychosis	-	-	-	3	3	3	-	6	6	-	-	-	-	9	9
Other diseases of brain	-	-	-	-	-	-	3	1	4	1	-	1	4	1	5
Mental observation without need for psychiatric care	-	-	-	-	-	-	9	-	9	21	12	33	30	12	42
Nervousness and debility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other non-psychiatric conditions - senility	-	-	-	-	-	-	-	-	-	7	2	9	7	2	9
TOTALS	4	13	17	31	60	91	1,101	582	1,683	207	151	358	1,343	806	2,149

TABLE 7
ALBERTA HOSPITAL, EDMONTON
DISCHARGES SHOWING DURATION OF RESIDENCE IN HOSPITAL

DIAGNOSIS	Under 3 mos.				Under 6 mos.				Under 9 mos.				Under 12 mos.				Under 2 yrs.				Over 2 yrs.				Total			
	M		F		M		F		M		F		M		F		M		F		M		F		M		F	
	T		T		T		T		T		T		T		T		T		T		T		T		T		T	
General paralysis of the insane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Syphilis of central nervous system	196	171	367	110	1	1	1	1	25	20	45	10	8	18	4	22	22	4	26	315	273	1	1	588	1	1	588	1
Schizophrenia (all categories)	37	56	93	64	3	5	8	110	46	4	5	5	5	5	1	1	3	1	4	50	67	4	4	117	4	4	117	4
Manic depressive (all categories)	5	21	26	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	7	26	4	4	33	7	7	33	7
Involuntary melancholia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paranoia and paranoid states	8	9	17	3	2	5	1	2	1	1	2	-	-	-	-	-	-	-	-	12	12	1	1	24	12	12	24	12
Senile psychosis	6	8	14	4	3	7	1	2	1	1	1	-	-	-	-	-	-	-	-	12	13	1	1	25	12	12	25	12
Pre-senile psychosis	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	5	3	3	5	3
Psychosis with cerebral arteriosclerosis	25	4	29	5	2	7	3	-	3	-	3	-	-	-	-	-	-	-	-	36	6	1	1	42	36	6	42	36
Alcoholic psychosis	22	6	28	1	-	1	1	-	2	1	-	-	2	1	-	-	-	-	-	27	6	-	-	33	27	6	33	27
Psychosis of other demonstrable etiology	4	3	7	3	1	4	1	-	1	-	1	1	-	1	-	-	-	-	-	11	8	2	3	19	11	8	19	11
Other and unspecified psychoses	13	9	22	2	4	6	-	-	6	-	-	-	-	-	-	-	-	-	-	15	30	1	1	45	15	30	45	15
Anxiety reaction	12	12	24	1	1	2	-	-	1	-	1	-	-	-	-	-	-	-	-	14	15	1	1	29	14	15	29	14
Hysterical reaction	-	8	8	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	9	10	-	-	19	9	10	19	9
Obsessive-compulsive reaction	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	-	1	-
Neurotic depressive reaction	51	57	108	5	6	11	3	4	3	1	4	-	3	3	-	-	-	-	-	60	67	1	1	127	60	67	127	60
Psychoneurosis with somatic symptoms (somatization reaction) affecting circulatory system	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other and unspecified psychoneurotic reactions	9	16	25	1	5	6	1	2	1	1	2	-	-	-	-	-	-	-	-	11	23	1	1	34	11	23	34	11
Pathological personality (all categories)	108	41	149	9	5	14	3	4	9	3	4	-	1	1	-	-	-	-	-	122	48	1	1	170	122	48	170	122
Immature personality	33	20	53	1	2	3	-	1	1	1	1	-	-	-	-	-	-	-	-	34	24	-	-	58	34	24	58	34
Alcoholism without psychosis	465	81	546	23	1	24	9	10	2	1	10	2	1	3	1	-	-	-	-	500	84	-	-	584	500	84	584	500
Other drug addiction	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	3	2	1	3	2
Primary childhood behaviour disorders	11	13	24	2	1	3	-	-	2	-	-	-	-	-	-	-	-	-	-	13	14	-	-	27	13	14	27	13
Mental deficiency without psychosis	14	23	37	3	7	10	-	1	-	1	-	-	-	-	-	-	-	-	-	19	32	1	1	51	19	32	51	19
Other and unspecified disorders of character, behaviour and intelligence	24	21	45	-	2	2	1	2	-	1	2	-	-	-	-	-	-	-	-	25	26	-	-	51	25	26	51	25
Paralysis agitans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epilepsy	11	5	16	1	2	3	-	1	-	-	-	-	-	-	-	-	-	-	-	12	8	-	-	20	12	8	20	12
Puerperal psychosis	-	7	7	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other diseases of brain	2	1	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	9	-	-	5	4	9	5	4
Mental observation without need for psychiatric care	29	11	40	-	-	-	1	-	-	-	-	-	1	1	-	-	-	-	-	30	12	-	-	42	30	12	42	30
Nervousness and debility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other non-psychiatric conditions	4	2	6	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	-	-	9	7	2	9	7
TOTALS	1,095	609	1,704	118	117	235	51	36	87	19	17	36	33	27	9	36	33	18	51	1,343	806	51	18	2,149	1,343	806	2,149	1,343

TABLE 8
ALBERTA HOSPITAL, EDMONTON
DEATHS BY ABRIDGED INTERNATIONAL STATISTICS
CLASSIFICATION

	Male	Female	Total
Malignant neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	6	4	10
Vascular Lesions Affecting Central Nervous System	8	1	9
Arteriosclerotic and Degenerative Heart Disease	7	4	11
Other Diseases of Heart	—	3	3
Pneumonia	14	10	24
Nephritis and Nephrosis	1	2	3
Senility Without Mention of Psychosis, Ill-defined and Unknown Causes	11	6	17
All Other Diseases	4	3	7
All Other Accidents, Including Burns	1	2	3
Suicide and Self-inflicted Injury, Including Effects of Injuries	1	—	1
TOTAL	53	35	88

TABLE 9
ALBERTA HOSPITAL, EDMONTON
DEATHS BY DIAGNOSIS

	Male	Female	Total
General Paralysis of the Insane	1	—	1
Schizophrenia (All Categories)	11	3	14
Manic Depressive (All Categories)	1	1	2
Involuntal Melancholia	—	1	1
Paranoia and Paranoid States	1	—	1
Senile Psychosis	6	7	13
Pre-Senile Psychosis	2	1	3
Psychosis with Cerebral Arteriosclerosis	16	6	22
Alcoholic Psychosis	2	—	2
Psychosis of Other Demonstrable Etiology	2	3	5
Other and Unspecified Psychoses	—	1	1
Neurotic Depressive Reaction	—	2	2
Psychoneurotic Disorders, Other, Mixed	—	1	1
Alcoholism Without Psychosis	1	—	1
Mental Deficiency Without Psychosis	1	1	2
Epilepsy	1	—	1
Other Diseases of Brain	—	1	1
Senility	8	7	15
TOTAL	53	35	88

CONTINUED TREATMENT HOSPITALS

ALBERTA HOSPITAL, CLARESHOLM
ALBERTA HOSPITAL, RAYMOND
ROSEHAVEN, CAMROSE

At the Alberta Hospital, Claresholm, a new building was completed just at the end of the year which delayed the planned redistribution of patients at Raymond. Construction was commenced in the late fall on an Occupational and Recreational Therapy Building and a Staff Residence for both men and women. The patient population at the end of the year was 105 men and 236 women, one less than in the previous year. There were no changes in the operation of the Alberta Hospital, Raymond. There were 117 patients in residence at the end of the year.

The number of patients at Rosehaven, Camrose, was reduced by 17 due to the demolition of a small temporary ward unit in preparation for construction of a new powerhouse and kitchen building as well as a new ward unit. There were 91 deaths chiefly from Degenerative Heart Disease and Terminal Pneumonia. The average age at death was 83.5 years. Most of the patients at Rosehaven are transferred from the active treatment hospitals and are persons who could not be cared for in nursing homes.

ALBERTA HOSPITAL, CLARESHOLM
A. R. Schrag, M.D., C.R.C.P. (C),
Medical Superintendent

MOVEMENT OF PATIENTS

The total number of patients in residence January 1, 1967, was 342. There were 109 male patients and 233 female patients.

One female patient was admitted under Form V.

Twenty-seven female patients and four male patients were transferred to this hospital from the Alberta Hospital, Ponoka, the Alberta Hospital, Edmonton, the Holy Cross Hospital, Calgary, and the Claresholm Municipal Hospital.

Three female patients were discharged.

There were 12 deaths of which 11 were female patients and one male patient.

Thirteen female patients and five male patients were transferred to the Alberta Hospitals at Edmonton and Ponoka for further psychiatric care or necessary medical or surgical treatment, or temporarily transferred to Calgary Hospitals for orthopedic surgery.

There were 341 patients, 105 male and 236 female, in residence at December 31, 1967.

Under The Alberta Mental Health Act the status of admission was changed for five patients from Renewal Certificates to Voluntary, and one from Certificate of Detention to Voluntary. Authorization for treatment of 37 patients without relatives was obtained under Section 13(1a).

NEW BUILDINGS

Construction of the fifth ward was completed, and the Occupational Department moved into the one wing in December. Construction started on the Staff Residence and MacLean Hall.

GENERAL HEALTH

The general health of the patients was good. The increased number of geriatric patients, who required total care, made it necessary to augment the staff.

The necessary immunization program of patients and staff was carried out as directed.

Emergency X-Ray and Laboratory tests were done at the Claresholm Municipal Hospital.

Two of the local physicians visited the hospital and took emergency calls.

OCCUPATIONAL DEPARTMENT

The Occupational Therapy Department made and sold articles throughout the year. The usual display was arranged at the Claresholm Annual Fair.

Crafts and group activities were continued on the wards and regressed patients were encouraged to join in simple crafts.

A group of female patients went to the garden during the summer months.

RECREATIONAL ACTIVITIES

Many parties were organized on each ward and patients from other wards were entertained.

The patients' choral group visited and sang on all the wards. Their Christmas Carols were very well received.

Both male and female patients continued to enjoy the dancing group organized by the Occupational Staff.

During the winter the patients went for daily walks and spent many hours on the lawns during the summer.

Many of the patients enjoyed the weekly shows.

Organizations from Claresholm and the surrounding areas entertained the patients at teas and outings. The Callow Coach came twice each month during the summer.

Many local groups brought carol singers to the hospital.

Bad weather cancelled the annual drive organized by the men's organizations at Christmas.

RELIGIOUS SERVICES

Religious services were conducted each Sunday by the local clergy. Other groups held devotional services once or twice a month. Local residents took patients to the church services in town or to the women's church groups.

BUILDINGS

The maintenance staff made the necessary repairs. The necessary outside painting was done and one ward was repainted. Installation of an air cooling system was commenced.

GARDENS and GROUNDS

There was an abundant crop of vegetables. There was a shortage of shaded areas for the patients.

STAFF

The increased number of patients requiring total care necessitated augmenting the staff.

The advice and help of the Consultant Dietitian was greatly appreciated.

VISITORS

The Deputy Minister of Health, the Director, Division of Mental Health, and the Assistant Director, visited the hospital and their help and advice was appreciated.

Relatives and friends visited the patients during the year.

TABLE 1
ALBERTA HOSPITAL, CLARESHOLM
MOVEMENT OF PATIENT POPULATION

	Male			Female			Total
Patients on Books at December 31, 1966	109	239	348				
ADMISSIONS	M	F	T	M	F	T	
First Admissions:							
Section 5	0	1	1				
Section 6	0	0	0				
Section 7	0	0	0				
Section 8	0	0	0				
Section 9(1)(a)	0	0	0				
Section 9(1)(b)	0	0	0				
Section 9a	0	0	0				
Re-Admissions:							
Section 5	0	0	0				
Section 6	0	0	0				
Section 7	0	0	0				
Section 8	0	0	0				
Section 9(1)(a)	0	0	0				
Section 9(1)(b)	0	0	0				
Section 9a	0	0	0				
Transfers In:	0	0	0	4	27	31	
	113	28	32				
SEPARATIONS							
Discharges:							
As recovered	0	0	0				
As much improved	0	0	0				
As improved	0	0	0				
As unchanged	0	3	3				
As not Psychotic	0	0	0				
Deaths:	0	3	3	1	11	12	
Transfers Out:	5	13	18				
	6	27	33				
	107	240	347				
On the Books December 31, 1967	107	240	347				
In Residence December 31, 1967	105	236	341				
On Leave or Otherwise Absent	2	4	6				

TABLE 2

ALBERTA HOSPITAL, CLARESHOLM
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	3	3
Syphilis of Central Nervous System	2	2	4
Schizophrenia (All Categories)	93	146	239
Manic Depressive (All Categories)	1	18	19
Involuntal Melancholia	1	7	8
Paranoia and Paranoid States	5	6	11
Senile Psychosis	2	—	2
Pre-Senile Psychosis	—	18	18
Psychosis with Cerebral Arteriosclerosis	2	8	10
Alcoholic Psychosis	—	5	5
Psychosis of Other Demonstrable Etiology	—	1	1
Other and Unspecified Psychoses	—	9	9
Anxiety Reaction	—	—	—
Hysterical Reaction	—	—	—
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	—	—	—
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting Circulatory System	—	—	—
Other and Unspecified Psychoneurotic Reactions	—	3	3
Pathological Personality (All Categories)	—	—	—
Immature Personality	—	—	—
Alcoholism Without Psychosis	—	—	—
Other Drug Addiction	—	—	—
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	1	10	11
Other and Unspecified Disorders of Character, Behaviour and Intelligence	—	—	—
Paralysis Agitans	—	—	—
Epilepsy	—	1	1
Puerperal Psychosis	—	—	—
Other Diseases of Brain	—	3	3
Mental Observation Without Need for Psychiatric Care	—	—	—
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	—	—	—
TOTALS	107	240	347

TABLE 3
ALBERTA HOSPITAL, CLARESHOLM
CAUSES OF DEATH
ABRIDGED INTERNATIONAL CLASSIFICATION

Disease	Male	Female	Total
Cerebrovascular Occlusion	—	2	2
Coronary Thrombosis	—	1	1
Cerebrovascular Hemorrhage	—	3	3
Coronary Occlusion	—	2	2
Pneumonitis—Cachexia	—	1	1
Broncho Pneumonia	—	1	1
Carcinomatosis	—	1	1
Gastric Hemorrhage	1	—	1
TOTAL	1	11	12

TABLE 4
ALBERTA HOSPITAL, CLARESHOLM
CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL PSYCHIATRIC DIAGNOSIS

Disease	Male	Female	Total
Psychosis with Cerebral Arteriosclerosis	—	2	2
Schizophrenia—Paranoid	—	1	1
Schizophrenia—Catatonic	1	2	3
Pre-Senile Dementia	—	1	1
Psychosis due to Chronic Encephalitis	—	1	1
Senile Dementia	—	2	2
Psychotic Depressive Reaction	—	1	1
Schizophrenia—Catatonic on Mental Defective Basis	—	1	1
TOTAL	1	11	12

ALBERTA HOSPITAL, RAYMOND

A. R. Schrag, M.D., C.R.C.P. (C),
Medical Superintendent

MOVEMENT OF PATIENTS

On January 1, 1967, there were 117 patients in residence, three on leave of absence, to total 120 patients on the register. During the year there were five admissions by transfer from other Alberta Hospitals. Separations totalled four, comprising three deaths and one transfer to another Alberta Hospital. Thus, on December 31, 1967, there were 121 patients registered, 119 in residence and two on leave of absence.

ACCIDENTS AND ELOPEMENTS

There were no elopements. Two patients fell, one dislocating her shoulder and the other sustaining a fractured right clavicle.

GENERAL HEALTH

All patients were given physical examinations and any abnormalities found were referred to a local clinic of four medical doctors who resolved the medical and surgical requirements satisfactorily. Three patients were found to have Acute Diabetes. Necessary X-Ray and laboratory work was done at the Raymond Municipal Hospital, Raymond Doctor's Clinic and the Lethbridge Municipal Hospital. Emergency dental work was resolved by the local dentist and those patients requiring prescription glasses were taken to an optometrist in Lethbridge. A psychiatrist from the Guidance Clinic at Lethbridge made several visits to interview those patients requiring re-certification and his counsel was available whenever requested.

OCCUPATIONAL THERAPY

Daily morning and afternoon classes were held in the Occupational parlor for patients interested in handwork of embroidery, weaving, knitting, crocheting, quilting and mending. This bright, sunny room was also used as a reading room and afternoon tea and cigarettes were served. A radio provided music and the news of the day which often stimulated discussions. Other areas of occupation for the patients were the laundry, kitchen and dining halls, sewing room, nurses residence, wards and dormitories. Each department served afternoon tea and cigarettes. There were approximately 75 patients participating in these various occupations daily.

LIBRARY

The library was situated in the Occupational Therapy Parlor. The cataloguing of new books, lending and returning of books was the responsibility of one patient. The Raymond Public Library donated many fine books, some new and others in excellent repair. These and bound volumes of magazines covered all fields of interest. Several magazines were subscribed to by patients or by gift subscriptions to them.

RELIGIOUS SERVICES

Catholic and United Church Services were held at the hospital once each month. On several occasions the choir from Coaldale, Alberta, accompanied the United Church Minister, bringing a song service which was thoroughly enjoyed. The Priests, United Church Minister and Mormon Bishops presided at patients' funerals and gave freely of their time whenever a request was made.

RECREATION AND ENTERTAINMENT

The weekly presentation of picture shows continued to provide the most interest and enjoyment for the largest group of patients. This year a wide angle lense for the projector and a wide screen was purchased to enable the showing of a greater variety of more up-to-date films.

Through the summer the Callow Coach took groups of 20 patients on picnics to various parks or on sight-seeing tours once each month. These trips were anticipated with great enthusiasm and much interest was shown in crop progress, new construction, et cetera.

The Raymond Rotary Club brought bouquets of early tulips, daffodils and peonies that had been flown in from British Columbia. These flowers were a breath of spring and a delight on the wards. The Raymond Music Club brought their 24th annual Christmas Concert and treats to the patients which was thoroughly enjoyed. The wards and Christmas trees were beautifully decorated and the patients were proud of their participation in the project when complimented on the showing. Wrapped Christmas gifts were donated by the Lethbridge Division of the Canadian Society of Radiological Technologists, the Lethbridge Branch of the Canadian Mental Health Association, the Quota Club, the Major Jack Ross Chapter I.O.D.E., the Colonel Mewburn Chapter I.O.D.E. and the Women's Institute. Donations of used clothing, jewellery and cosmetics were received periodically from the women's organizations of Milk River, Warner, New Dayton, Jefferson, Cardston and Taber. The faithful support of the women in all of these groups is highly commendable.

Picnics on the lawns, Bingo parties, dances, et cetera were held at intervals throughout the year. There was a piano, radio and television set in the dayroom as well as in the Annex sitting room.

STAFF CHANGES

The farm worker reached retirement age and this position was changed to that of vegetable gardener which was filled by an enthusiastic worker. The ward aides appointed one of their number as liaison officer and monthly meetings were held. This proved to be a very satisfactory arrangement. Relief personnel for staff illnesses and vacations was adequate and satisfactory.

VISITORS

The Director and Assistant Director, Division of Mental Health, made several visits of inspection and instruction and their guidance was very much appreciated.

stair wells on the first floor were painted. On both floors new wall-hung convex radiators replaced the old cast iron standing type radiators. A new toilet was added to the north bathroom and a new bathtub and hand rails replaced the old tub in the south bathroom. For the kitchen new fluorescent light fixtures replaced the old drop type incandescent fixtures, a new stove was purchased and a garburator added to the equipment. In the patient's dining hall the light fixtures were replaced with fluorescent lighting and new tables and chairs purchased. Three window-type refrigerator air conditioners were purchased for installation in the small dayroom, main office and sewing room. The sewing room also received electric scissors. A flat ironer was purchased for the laundry. A new typewriter was purchased for the main office and a portable typewriter for the Matron's office. Colorful chrome and vinyl chairs were added to the dayroom furnishings and stacking lawn chairs purchased for color and comfort on the lawns.

There was no new construction.

CONCLUSION

The general health of the patients was satisfactory and there were no infectious illnesses. There was adequate medical co-operation and no shortage of medical supplies. An ambitious maintenance program was carried out and through the year there were no serious equipment breakdowns in any of the departments.

Seven patients continued hospitalization by recertification and all others were under Voluntary Certificates.

	Male	Female	Total
Patients on Books at December 31, 1966	—	120	120
ADMISSIONS			
First Admissions:			
Section 5	0	0	0
Section 6	0	0	0
Section 7	0	0	0
Section 8	0	0	0
Section 9(1) (a)	0	0	0
Section 9(1) (b)	0	0	0
Section 9a	0	0	0
Re-Admissions:			
Section 5	0	0	0
Section 6	0	0	0
Section 7	0	0	0
Section 8	0	0	0
Section 9(1) (a)	0	0	0
Section 9(1) (b)	0	0	0
Section 9a	0	0	0
Transfers In:	0	5	5
	0	5	5
SEPARATIONS			
Discharges:			
As recovered	0	0	0
As much improved	0	0	0
As improved	0	0	0
As unchanged	0	0	0
As not Psychotic	0	0	0
Deaths:	0	3	3
Transfers Out:	0	1	1
	0	4	4
On the Books December 31, 1967	0	121	121
In Residence December 31, 1967	0	119	119
On Leave or Otherwise Absent	0	2	2

TABLE 2

ALBERTA HOSPITAL, RAYMOND
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITALS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	—	2	2
Syphilis of Central Nervous System	—	84	84
Schizophrenia (All Categories)	—	8	8
Manic Depressive (All Categories)	—	1	1
Involuntary Melancholia	—	6	6
Paranoia and Paranoid States	—	1	1
Senile Psychosis	—	1	1
Pre-Senile Psychosis	—	5	5
Psychosis with Cerebral Arteriosclerosis	—	3	3
Alcoholic Psychosis	—	—	—
Psychosis of Other Demonstrable Etiology	—	—	—
Other and Unspecified Psychoses	—	—	—
Anxiety Reaction	—	—	—
Hysterical Reaction	—	—	—
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	—	—	—
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting	—	—	—
Circulatory System	—	1	1
Other and Unspecified Psychoneurotic	—	—	—
Reactions	—	3	3
Pathological Personality (All Categories)	—	—	—
Immature Personality	—	—	—
Alcoholism Without Psychosis	—	—	—
Other Drug Addiction	—	—	—
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	—	3	3
Other and Unspecified Disorders of	—	—	—
Character, Behaviour and Intelligence	—	1	1
Paralysis Agitans	—	—	—
Epilepsy	—	1	1
Puerperal Psychosis	—	—	—
Other Diseases of Brain	—	1	1
Mental Observation Without Need for	—	—	—
Psychiatric Care	—	—	—
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	—	—	—
TOTALS	—	121	121

TABLE 3

ALBERTA HOSPITAL, RAYMOND
CAUSES OF DEATH

ABRIDGED INTERNATIONAL CLASSIFICATION

Classification	Male	Female	Total
Malignant Neoplasms	—	1	1
Arteriosclerotic and Degenerative Heart ...	—	1	1
Gastritis, Duodenitis, Enteritis and Colitis ..	—	1	1
TOTAL	—	3	3

TABLE 4

ALBERTA HOSPITAL, RAYMOND
DEATHS BY ORIGINAL DIAGNOSIS

Diagnostic Classification	Male	Female	Total
Schizophrenia (All Categories)	—	2	2
Paranoia and Paranoid States	—	1	1
TOTAL	—	3	3

ROSEHAVEN, CAMROSE

A. R. Schrag, M.D., C.R.C.P. (C),

Medical Superintendent

MOVEMENT OF RESIDENTS

On January 1, 1967, the resident population at Rosehaven numbered 484, of which 270 were men and 214 were women. The total number in residence on December 31, 1967, was 467; 247 men and 220 women.

There were 109 residents admitted to Rosehaven during 1967. Of this number, 55 were transferred from Alberta Hospital, Edmonton, 19 from Alberta Hospital, Ponoka, one was readmitted on transfer from Alberta Hospital, Edmonton, and 34 returned from leave of absence.

Separations from Rosehaven during 1967 numbered 126; 91 were attributable to death, two were discharged to nursing homes and 33 went on leave of absence.

With the demolition of a small unit, the total number of beds at Rosehaven was reduced by 32. The admission of male patients by transfer was correspondingly reduced.

Admissions throughout the year in the form of transfers from the Alberta Hospitals filled beds made available by death or discharge. The average daily population was 471.5.

Deaths were due to degenerative causes. The average age at death was 83.5 years.

In accordance with the Alberta Mental Health Act, 25 residents were changed to voluntary admission status. At the end of the year, two patients remained on renewal certificates.

ACCIDENTS AND ELOPEMENTS

During the year, a number of residents received injuries either from accidental falls or as a result of interference from other residents. Many of these resulted in contusions or lacerations of a minor nature and required only first aid treatment. There were 61 accidents of a more serious nature which required either medical and surgical attention or X-ray investigation. These included 18 lacerations requiring suturing, 26 fractures and dislocations and 17 X-ray or medical examinations. There was no increase in the number of accidents requiring medical attention but there was an increase in the number of minor accidents largely attributable to accidental falls.

GENERAL HEALTH

The general health of the residents was considered satisfactory in view of the age group. An advanced state of mental and physical deterioration was evident in the majority of admissions as well as a progressive decline in the resident population.

An average of 75 residents required bed care each day. During the year 47 patients were admitted to St. Mary's Hospital and spent 318 hospital days receiving surgical, orthopedic or medical attention. There was no increase in the number of residents admitted to St. Mary's Hospital but an increase in the number of residents requiring bed care at Rosehaven was evident.

Out-patient work done at St. Mary's Hospital for Rosehaven residents included 454 laboratory tests, 180 X-rays, 16 minor surgical procedures and 12 diagnostic tests. Eighty specimens were sent to the Provincial Laboratory for culturing. Six patients attended the Smith Clinic for follow-up cancer examination. Tuberculin tests were given to residents if indicated and chest X-rays were taken on all reactors by the Mobile Chest X-ray unit. Any recommendations for further investigations were done.

Medical care was supplied by the doctors of the Smith Clinic, Camrose.

Two visits were made by the dentist from Alberta Hospital, Edmonton, and routine examinations and care was given to the residents. Emergency dental work was done by a local dentist.

The service of a local optometrist was available and glasses were supplied to residents when prescribed.

OCCUPATIONAL THERAPY

Occupational therapy classes were operated throughout the year. An average of 71 residents attended classes twice a week. Articles made were readily sold, being purchased by the residents, staff members or friends. An average of 36 residents assisted with light tasks on the wards.

RELIGIOUS SERVICES

Weekly Protestant Church services were held at Rosehaven and arranged by the Ministerial Association. The services of the Roman Catholic priests were available as needed. Local ministers visited patients and services were arranged for special occasions.

RECREATION

An average of 95 residents had grounds privileges and were out almost daily. Large numbers were taken out as lawn groups when weather permitted. A movie film was shown every other week from October to June with an average of 95 residents attending. Birthday parties were held for small groups during the year. Suitable entertainment was arranged at Christmas, Hallowe'en, Easter and Thanksgiving. Picnic outings were enjoyed during the summer. A group of residents was taken on a tour to Camrose to view the Christmas lights. Cards, games or bingo were arranged each week and television and radios were available for the use of the residents on all wards. Several organizations and church groups sponsored car rides, parties, concerts or social hours for the residents. Ex-servicemen were entertained each month by members of the Ladies' Auxiliary to the Canadian Legion.

BUILDINGS

Buildings were well maintained and repairs done promptly. The building known as Paden Cottage was demolished during the year diminishing the resident census

by 32. The basement area of Hawthorn was remodelled to provide storage areas for equipment and clothing. Work was commenced on a new Service Building complex and connecting tunnels. Plans have been completed to erect one of the three proposed ward buildings.

GARDEN AND GROUNDS

The garden and grounds were well maintained during the year. The flower beds and lawns were beautiful and fresh cut flowers and potted plants were supplied to the wards.

STAFF

The general health of the staff was good. A considerable number of staff sustained lumbar strains or injuries in the course of their duties. The staff immunization program was continued. All staff had chest X-rays and Tuberculin tests were done. T.A.B.T. vaccine was given to all staff and all food handlers had routine stool cultures.

There were vacancies on the nursing staff throughout the year and trained personnel was not available either to fill the staff complement or the summer relief positions. Vacancies arising from resignations of untrained staff were filled although there was more difficulty experienced in procuring suitable staff for relief or permanent positions.

A housekeeping department was organized and additional institutional workers and cleaning porters were appointed for this department. A new position of Nursing Instructor and Health Nurse was created and filled.

VISITORS

Visits were made to Rosehaven by the Director of Mental Health and the Assistant Director during the year. The Board of Visitors toured the hospital in October.

Architects and consultants visited in connection with current construction and the proposed building program.

TABLE 1
ROSEHAVEN, CAMROSE
MOVEMENT OF PATIENT POPULATION

	Male	Female	Total	Male	Female	Total
In residence December 31, 1966				270	214	484
ADMISSIONS:						
Transferred from Alberta Hospital, Edmonton	29	26	55			
Transferred from Alberta Hospital, Ponoka	7	12	19			
Readmitted from Alberta Hospital, Edmonton	1	—	1			
Returned from L.O.A.	15	19	34			
	<u>52</u>	<u>57</u>	<u>109</u>			
				52	57	109
				<u>322</u>	<u>271</u>	<u>593</u>
SEPARATIONS:						
Deaths	60	31	91			
Discharged	1	1	2			
On L.O.A.	14	19	33			
	<u>75</u>	<u>51</u>	<u>126</u>			
				75	51	126
In residence December 31, 1967				247	220	467

TABLE 2

ROSEHAVEN, CAMROSE

ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITALS

Diagnostic Classification	Male	Female	Total
General Paralysis of the Insane	3	—	3
Syphilis of Central Nervous System	7	—	7
Schizophrenia (All Categories)	58	39	97
Manic Depressive (All Categories)	8	19	27
Involitional Melancholia	1	3	4
Paranoia and Paranoid States	11	11	22
Senile Psychosis	67	84	151
Pre-Senile Psychosis	2	—	2
Psychosis with Cerebral Arteriosclerosis ..	55	39	94
Alcoholic Psychosis	5	—	5
Psychosis of Other Demonstrable Etiology..	5	1	6
Other and Unspecified Psychoses	—	—	—
Anxiety Reaction	—	—	—
Hysterical Reaction	—	—	—
Obsessive-Compulsive Reaction	—	—	—
Neurotic Depressive Reaction	3	1	4
Psychoneurosis with Somatic Symptoms (Somatization Reaction) Affecting	—	—	—
Circulatory System	—	1	1
Other and Unspecified Psychoneurotic Reactions	—	—	—
Pathological Personality (All Categories)....	—	—	—
Immature Personality	—	—	—
Alcoholism Without Psychosis	5	—	5
Other Drug Addictions	—	—	—
Primary Childhood Behaviour Disorders	—	—	—
Mental Deficiency Without Psychosis	2	5	7
Other and Unspecified Disorders of Character, Behaviour and Intelligence	—	—	—
Paralysis Agitans	—	—	—
Epilepsy	—	—	—
Puerperal Psychosis	—	—	—
Other Diseases of Brain	—	—	—
Mental Observation Without Need for Psychiatric Care	—	—	—
Nervousness and Debility	—	—	—
Other Non-Psychiatric Conditions	15	17	32
TOTALS	247	220	467

TABLE 3

ROSEHAVEN, CAMROSE

CAUSES OF DEATH
ABRIDGED INTERNATIONAL CLASSIFICATION

Disease	Male	Female	Total
Diseases Classified as Infective	—	1	1
Malignant Neoplasms	4	—	4
Vascular Lesions	9	4	13
Arteriosclerotic and Degenerative	—	—	—
Heart Disease	20	17	37
Pneumonia	26	9	35
Cirrhosis of the Liver	1	—	1
TOTAL	60	31	91

TABLE 4

ROSEHAVEN, CAMROSE

CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL
PSYCHIATRIC DIAGNOSIS

Disease	Male	Female	Total
General Paralysis of the Insane	1	—	1
Syphilis of the Central Nervous System	1	1	2
Schizophrenia (All Categories)	8	5	13
Manic Depressive	1	1	2
Paranoia and Paranoid States	2	1	3
Senile Psychosis	22	12	34
Psychosis with Cerebral Arteriosclerosis	17	8	25
Alcoholic Psychosis	1	—	1
Psychosis with Brain Tumor	1	—	1
Other Unspecified Psychoneurotic Reactions	1	—	1
Other Non-Psychiatric Conditions	5	3	8
TOTAL	60	31	91

INSTITUTIONS FOR MENTAL DEFECTIVES

ALBERTA SCHOOL HOSPITAL, RED DEER DEERHOME, RED DEER

The Alberta School Hospital, Red Deer, patient population increased by 55 to 977 which includes patients cared for at the Baker Memorial Sanatorium where another section of Pavilion 5 was made available for wheelchair patients.

Dr. J. M. Brown was appointed Superintendent of Deerhome on July 1st providing much needed administrative leadership and co-ordination of programs. Two patient placement officers were appointed to supervise trainees in employment in the community and do follow-up work. The patient population was increased by nine to 1,228.

ALBERTA SCHOOL HOSPITAL RED DEER

L. J. le Vann, L.R.C.P. Edin., L.R.C.S. Edin.,
L.R.F.P.S. Glas., Superintendent

IN RESIDENCE, ADMISSIONS, DISCHARGES, DEATHS

The role of Alberta School Hospital remained that of a primary admission centre for mentally retarded children between the ages of four and 16 years. During the year there were 119 new admissions and 14 patients were readmitted. The number of retarded children listed in residence during 1967 was 1,055. These comprised 597 males and 458 females. The total population at the end of the year was listed as being 977; 541 males and 436 females. These figures also included patients in the Pediatric Unit of the Baker Memorial Sanatorium.

Forty-six patients were discharged to work situations, there were 14 patients transferred to Deerhome and 18 deaths.

No patients were presented to the review panel since all patients in residence were here on a voluntary basis.

APPLICATIONS FOR ADMISSION

There were 159 new applicants for admission to the School during the year. Of these applicants, 60 were admitted, however, in all 133 patients were admitted during the year.

BOARD OF VISITORS, EUGENICS BOARD VISITS, STERILIZATIONS, ET CETERA

The Board of Visitors visited the School on October 17th and inspected all the villas and interviewed many patients.

The Eugenics Board held three meetings at Alberta School Hospital and had thirty cases presented to them. Two cases were deferred and one case from Deerhome was included in the number of cases presented. Twenty-eight

cases were passed by the Eugenics Board of Alberta for sterilization. Eugenics surgery was carried out on 59 patients; 14 males and 16 females from Alberta School Hospital, 14 males and six females from Deerhome and one male and eight female out-patients.

STAFF CHANGES AND ACTIVITIES

The School was without a full-time Medical Officer but utilized the part-time services of two local physicians and was able to call in a wide range of medical specialists with respect to patients' medical needs. There was improvement in obtaining male attendants and nursing staff generally.

HEALTH OF TRAINEES AND STAFF

The health of the children and staff remained good. There were no cases of tuberculosis and general immunization procedures were carried out on patients and staff. The patient population received their initial inoculations or booster shots for poliomyelitis, diphtheria and the enteric fevers in accordance with clinical indications. Measles vaccination was also carried out on young children who had not yet had measles. Nursing staff were immunized against enteric fevers and chest films were carried out as a yearly procedure on all staff.

TRAINING PROGRAM FOR NURSES AND ATTENDANTS

During the year 99 students started their first year lectures. At the end of the year 86 of these were still so employed. Fifty-four students started second year lectures, of these 48 were still present at the end of the year. The third year nursing students numbered 21 and by the end of the year 20 were still present. This represented a much lower percentage of drop-outs from each nursing year and it was anticipated that the second year students who completed this year's program, will next year present the largest class ever graduated from the Alberta School Hospital.

TRAINING PROGRAM FOR TRAINEES

The academic school program placed emphasis in relating all academic subjects to practical life experiences. Every effort was made to develop the child to his highest level of academic achievement, combined with vocational training. Children who were transferred entirely to vocational training programs were graduated from the academic program in a formal exercise and presented with diplomas. This was in keeping with the continuing "conditioning" methods which were employed very successfully at this School over a period of many years. The graduation

ceremony also acted as a stimulus for these children to encourage them to maintain the same interest and ambition in their vocational training.

The children visited the Centennial Train when it was in Red Deer. The School chorus entered the Kiwanis Parkland Music Festival and gained more points for the year than in 1966. However, due to extensive competition they placed third, tying with three of the city schools for normal children.

After the Easter holidays, 36 of the senior students went to the Court House to see a court in session. The court procedures were explained in detail by the circuit court judge and the students reacted favourably and showed great interest in the proceedings.

The School's centennial project took the form of an "Open House" for the City of Red Deer and many citizens from Red Deer attended to witness a performance by the school chorus as well as inspecting the school work program.

Many school projects were entered in the Edmonton Exhibition, two gained "Awards of Merit". The school children won 67 prizes at this exhibit.

The annual School Christmas concert was presented one week prior to Christmas and was attended by many of the citizens of Red Deer as well as many of the children's parents. It was felt that this open invitation to the local community was a continuing step in maintaining good rapport between the school and the community.

One hundred and fifty-six pupils attended the school program during the year and nine graduated.

The Sense Training area (junior school) had in daily attendance 99 children. From the sense training program the children were evaluated for the type of education that was anticipated for them, as well as preparation for promotion to the intermediate school. Ten children were promoted on this basis. The full number of children in attendance during 1967 was 115.

The Vocational Training Department continued as a means of adjunct training to the academic program. During the year 19 classes were held weekly. Two hundred and forty-seven students attended these classes. Among the major items built were three Fireball Sailing Boats, a Record Cabinet made for the Red Deer Centennial Library and Record and Amplifying Cabinets for the lounge at the School's Curling Rink. Numerous small articles of furniture and children's furniture were manufactured as well as games, stools and coffee tables. In addition a wide variety of outdoor furniture was also produced which included picnic sets, picnic tables, children's patio furniture, bird houses, chairs and one hot house.

The Occupational Therapy Department operated as in previous years and many patients benefited through attendance. During the year 196 patients attended occupational therapy classes. Occupational therapy classes also included instruction in cooking and sewing classes for trainees. Eight hundred projects were completed and since many of these were multiple projects, in all, in excess of 1,500 items were produced. The school entered 129 of these items in the Calgary and Edmonton Exhibitions and won 104 prizes, viz; 47 Firsts, 36 Seconds and 21 Thirds.

They also earned two Grade Award prizes in the rug section for best design and workmanship.

The School was asked to and exhibited at the Red Deer Fair and the Central Alberta Horticultural and Flower Show.

As in previous years, sales were held on the produced articles from the Occupational Therapy and Vocational Training Departments and sold to the general public and staff. These sales netted \$4,529.72.

The farm training program carried out maintained the impetus of previous years. Sixteen boys participated in this program for intensive training and this was augmented during the summer months by many boys of the severely retarded category who proved useful, particularly in the garden program section of the farm.

The farm training included tractor driving, harvester machine operation, as well as animal husbandry. The boys also showed several of the school cattle at the Red Deer Fair and assisted in the feeding and grooming of these cattle while they were at the fair. The intensive training section of the farm classes also attended the Red Deer Fair to examine machinery and livestock displays and attended seminars explaining the proper utilization of a wide variety of farm equipment.

DENTAL CARE

The School employed a dentist in conjunction with Deerhome who spent alternate weeks working at Alberta School Hospital and Deerhome. In view of the general lowering of the median age for this school and need for more intensive dental work, consideration was given towards providing Alberta School Hospital with a full-time dentist.

X-RAY AND E.E.G. DEPARTMENT

During the year, with the acquisition of an X-ray Technician, 2,474 X-rays were carried out at this School; 1,017 for Alberta School Hospital, 948 for Deerhome and 509 dental X-rays. In addition, 86 E.E.G. tracings were carried out as referrals from Deerhome, general practitioners from Central Alberta and Alberta School Hospital. This was an increase of 62 tracings over 1966.

LABORATORY

During the year 9,276 laboratory procedures were carried out at Alberta School Hospital and 776 laboratory requests were referred to a commercial laboratory. Two thousand, one hundred and forty-six bacteriological specimens were sent to the provincial laboratory for diagnosis and classification.

EXTRA MURAL ACTIVITIES

As during previous years, staff members were called upon by public groups for talks on mental deficiency, methods of treatment and the program being carried out at Alberta School Hospital.

The school was visited by the Honourable Minister of Health, members of the Alberta Guidance Clinics and Glenrose Hospital, as well as the Director and Assistant Director of the Division of Mental Health. Graduate and senior nurses from the University Hospital also visited the school for clinical rounds.

A Centennial railway was initiated and planned, two-thirds of a mile of railway track was laid and a railway locomotive and two coaches with a total capacity for 40 passengers were constructed. The Honourable Minister of Health honoured the school by driving in the final spike to this railway and navigated the train as Chief Engineer the first two circuits around the track. The costs for the materials for the train were provided by the Parent-School Organization. This group held four meetings at the school during the year to discuss the needs of the children, as well as participating in clinical seminars presented on their behalf.

SOCIAL SERVICE DEPARTMENT

The Social Workers interviewed all parents whose children were admitted to the school during the year, as well as investigating work placement situations for children who are likely to be discharged. Personal problems of trainees who had been discharged recently and in recent years were also investigated and counselling provided wherever necessary.

DIETARY DEPARTMENT

In the absence of a Dietitian, the diet of patients and staff came under the direct supervision of the Superintendent. The diet provided was ample, well balanced and generally well-liked. The augmentation and variety of foods was greatly enhanced with the addition of a new greenhouse, as well as utilizing produce from the vegetable acreage.

LAUNDRY AND LINEN REPAIR

Laundry

The operations of this department proved fairly satisfactory during the year. The capacity of the plant was adequate. The finishing of personal clothes presented some problems due to the varied types of clothes supplied by parents. The operation of the dry cleaning plant helped considerably in this respect.

The washing, cleaning and finishing of staff uniforms was a large part of the laundry operation.

The weekly average of pounds washed showed a slight increase from 43,900 in 1966 to 44,500 in 1967.

The use of separate vehicles for the pick up of soiled linen and the delivery of clean linen was instituted in an effort to reduce villa cross-infection.

Linen Repair

The linen repair staff functioned smoothly and provided service in the areas of staff uniform mending, manufacturing of drapes, mattress covers and items of personal clothing not normally available through regular purchasing channels.

Some good quality made-to-measure dresses were made for trainees who were either hard to fit, or as was more often the case, had insufficient funds to purchase clothing for themselves.

STORES

The provision of adequate budgets and the normal availability and delivery of all items enabled this department to function smoothly and efficiently. A major improvement was the completion of the renovation of the old main kitchen area in the main building for use by the Stores Department.

FARM

Fewer acres were seeded to grain than in former years due to the sale of a quarter section of rented land. Due to this fact and to the lateness of the spring, only oats and barley were seeded. Oat crops were well above average and barley about average. A very warm dry fall enabled these crops to be harvested in very good condition. First cut hay yielded better than last year, but second cut was poor due to dry weather in the late summer and fall.

DAIRY CATTLE

Milk production reached its highest peak during the year. This followed the national trend and was due mainly to dairy cattle breed improvement plans widely practiced throughout North America.

HOGS

The number of hogs raised was reduced due to the tearing down of the old log building used at one time for horses. The Federal Government paid premiums on Grade "A" hogs used for home consumption as well as on those for sale. This helped the School's operation as it was able to keep a constant check on meat quality without having to sell hogs at intervals throughout the year in order to determine "Grade".

POULTRY

Production average for eggs did not vary greatly from the past few years. Size and shape of eggs appeared to be satisfactory.

BEEF HERD

The size of the herd remained fairly constant at between 30 and 40 head. This number was, of course, dictated mainly by the amount of pasture available. The school fed-out most of its Holstein bull calves as well as its Herefords.

GARDEN

Vegetable crops yielded quite well in spite of hot dry weather during the latter part of the summer. Harvest weather was very good, but many vegetables did not keep

well. This condition was prevalent in many areas of the province. The construction of a new greenhouse enabled the school to increase its tomato crop considerably. New cold frames, with steam heating, were also constructed and were made available for use for the next crop year.

GROUNDS

The landscaping was completed at the new Female Staff Quarters. The tennis courts started last year were finished, but some landscaping was still required in this area. Construction of a 2/3-mile of model railway was completed early in September and the train was in operation until the weather became too cold. Trees were obtained from the Department of Agriculture last spring and planted in the area west of Willow Villa where trees had been destroyed to obtain fill for new road across the 55th street coulee. These trees were quite small in size and it may be some years before they are noticeable. This area was also sown to grass. A road grader was obtained from the Department of Highways for the winter months on a rental basis to be used for snow clearing of school grounds.

GENERAL OPERATIONS – FARM AND GARDEN

Problems were still encountered from trespassing and acts of vandalism. It was not possible to leave portable granaries or bale stacks in fields adjacent to city dwellings due to frequent damage sustained. Empty bottles were thrown into the fields doing considerable damage to tires on tractors and equipment. Large dogs were allowed to run loose and were a continuing source of harassment to livestock. Fences were damaged from time to time, allowing stock to wander onto roads and streets.

With the growth in size of Alberta School Hospital over the past number of years wet garbage for hog feeding exceeded requirements. The excess amount had to be hauled to the city dump. The installation of a garbage disposal unit was considered for future development.

MAINTENANCE AND RENOVATIONS

Extensive maintenance was done throughout the institution and farm to maintain the present buildings. A new machine shed was constructed and additional street lighting installed as well as work on the sidewalks, curbs and roads.

APPRECIATION

The Superintendent would at this time like to express his deep appreciation to the staff members of Alberta School Hospital for their devoted work and high measure of co-operation which was shown throughout the year; to the Honourable Minister of Health for his continuing sympathy with the School's endeavors and to the Director and Assistant Director of the Division of Mental Health who were always available and resourceful in providing help and advice when required to cope with any problems which arose during the year.

TABLE 1
ALBERTA SCHOOL HOSPITAL, RED DEER
MOVEMENT OF FEEBLEMINDED POPULATION

	M	F	T
Defectives on Books of Institution as of 31st December, 1966	514	408	922
ADMISSIONS:	M	F	T
1. First Admissions:			
Voluntary	73	46	119
2. Readmissions	10	4	14
3. Transfers	—	—	—
Total number of admissions	83	50	133
Total Number of Defectives on the Books during 1967	83	50	133
SEPARATIONS:			
1. Discharges	32	14	46
2. Transfers	13	1	14
3. Deaths	11	7	18
Total number of separations	56	22	78
Defectives on the Books of the Institution at 31st December, 1967	541	436	977

TABLE 2
ALBERTA SCHOOL HOSPITAL, REDDEER
AGE OF RESIDENT POPULATION CLASSIFIED WITH REFERENCE TO MENTAL STATUS

	IDIOT			IMBECILE			MORON			BORDERLINE			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
0 - 4	18	12	30	10	17	27	1	2	3	-	-	-	29	31	60
5 - 9	29	30	59	96	56	152	24	8	32	1	-	1	150	94	244
10 - 14	32	31	63	105	76	181	45	19	64	4	2	6	186	128	314
15 - 19	10	8	18	54	58	112	40	26	66	-	1	1	104	93	197
20 - 24	4	9	13	16	18	34	16	14	30	1	-	1	37	41	78
25 - 29	2	11	13	8	7	15	5	5	10	1	-	1	16	23	39
30 - 34	5	3	8	5	2	7	1	-	1	-	-	-	11	5	16
35 - 39	1	-	1	-	1	1	-	-	-	-	-	-	1	1	2
40 - 44	2	4	6	3	2	5	-	1	1	-	-	-	5	7	12
45 - 49	-	2	2	-	-	-	-	1	1	-	-	-	-	3	3
50 - 54	-	2	2	-	2	2	-	1	1	-	-	-	-	5	5
55 - 59	-	2	2	-	1	1	-	-	-	-	-	-	-	3	3
60 - 64	-	-	-	1	2	3	-	-	-	-	-	-	1	2	3
65 - 69	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
70 - 74	-	-	-	1	-	1	-	-	-	-	-	-	1	-	1
TOTALS	103	114	217	299	242	541	132	77	209	7	3	10	541	436	977

TABLE 4
ALBERTA SCHOOL HOSPITAL, RED DEER
AGE GROUP OF FIRST ADMISSIONS, RE-ADMISSIONS AND TRANSFERS

AGE GROUP	FIRST ADMISSION			RE-ADMISSIONS			TRANSFERS			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T
0 - 4	24	17	41	1	-	1	-	-	-	25	17	42
5 - 9	26	16	42	6	2	8	-	-	-	32	18	50
10 - 14	19	13	32	2	1	3	-	-	-	21	14	35
15 - 19	4	-	4	-	-	-	-	-	-	4	-	4
20 - 24	-	-	-	1	-	1	-	-	-	1	-	1
25 - 29	-	-	-	-	1	1	-	-	-	-	1	1
30 - 34	-	-	-	-	-	-	-	-	-	-	-	-
TOTALS	73	46	119	10	4	14	-	-	-	83	50	133

TABLE 3
ALBERTA SCHOOL HOSPITAL, RED DEER
MENTAL STATUS OF FIRST ADMISSIONS, RE-ADMISSIONS AND TRANSFERS

MENTAL STATUS	FIRST ADMISSIONS			RE-ADMISSIONS			TRANSFERS			TOTALS		
	M	F	T	M	F	T	M	F	T	M	F	T
IDIOT	16	22	38	1	-	1	-	-	-	17	22	39
IMBECILE	34	15	49	5	3	8	-	-	-	39	18	57
MORON	22	8	30	4	1	5	-	-	-	26	9	35
BORDERLINE	1	1	2	-	-	-	-	-	-	1	1	2
TOTALS	73	46	119	10	4	14	-	-	-	83	50	133

TABLE 5
ALBERTA SCHOOL HOSPITAL, RED DEER
CAUSES OF DEATH

Cause of Death	Male	Female	Total
Aspiration of Vomitus	2	—	2
Massive Cerebral Hemorrhage	1	—	1
Congenital Hydrocephalia	1	—	1
Bronchopneumonia	2	—	2
Hydrocephalus	—	1	1
Status Epilepticus	1	—	1
Pneumonia	—	1	1
Epilepsy Syncope	—	1	1
Nephritis	—	1	1
Acute Thyrotoxicosis	1	—	1
Cerebral Agenesis with Internal Hydrocephalus	1	—	1
Meningitis—Hydrocephalus	1	—	1
Congenital Myopathy	—	1	1
Hydrocephalus—Epilepsy	1	—	1
Septicemia	—	1	1
Pathological Fracture of Spine T 1, 2, Respiratory Distress, Aspiration Pneumonia	—	1	1
TOTALS	11	7	18

TABLE 6
ALBERTA SCHOOL HOSPITAL, RED DEER
DEATHS BY INTELLIGENCE LEVELS

Classification	Male	Female	Total
Idiot	6	3	9
Imbecile	3	3	6
Moron	2	1	3
Borderline	—	—	—
TOTALS	11	7	18

TABLE 7
ALBERTA SCHOOL HOSPITAL, RED DEER
DENTAL CARE

Examinations	1861
Restorations (fillings of all types)	145
Extractions	344
F.E. Treatments	213
Scalings and Prophylaxes	188
Dentures, Partial and Adjustments	50
X-rays	509
Work done under General Anaesthetics	26
Miscellaneous Treatments	258
Crowns and Bridges	10

DEERHOME, RED DEER
J. M. Brown, M.B., Ch.B., D.P.H.,
Medical Superintendent

MOVEMENT OF RESIDENTS

The number of patients in residence on 31st December, 1966, was 1,219 of whom 666 were male and 553 were female. On 31st December, 1967, the number of patients in residence was 1,228 of whom 682 were male and 546 were female. The details are as set out in Table 1. In addition, 132 patients were still out on leave of absence (80 male and 52 female).

During the year, under The Mental Health Act, the status of 15 patients was changed from Voluntary to Certificate and the status of five patients was changed from Certificate to Voluntary.

GENERAL HEALTH

The general health of the patients was maintained at a satisfactory level, bearing in mind the numerous chronic conditions and disabilities which prevailed throughout the institution.

The Director of the Alberta Guidance Clinic, Red Deer, visited once per week in the capacity of consultant to assess and treat those patients with psychiatric and

emotional problems. He made rounds of the wards and was also available to discuss with the staff any minor problems within the institution.

Medical care was provided by the Parsons Clinic and full-time medical staff; approximately 132 patients per week were seen by the doctors for varied ailments, medical and surgical consultations and accidents. The consultant surgeon made six visits and 47 patients were presented for surgical consultation. Forty-nine patients were admitted to the Red Deer General Hospital for surgery; 18 had minor surgery and 31 had major surgery performed. Ten patients were admitted to the Red Deer General Hospital for observation and treatment. Two patients had minor surgery at Parsons Clinic and four patients were admitted to the Alberta School Hospital, Red Deer, for surgery, two minor and two major.

Three patients were admitted to the Richard Parsons Auxiliary Hospital, all being transferred from the Red Deer General Hospital for long term care following fracture of the femur.

Three patients attended the Cancer Clinic, Edmonton, for follow-up assessment and advice. In all, four visits were made.

At the request of Parsons Clinic, seven patients were transferred to Alberta Hospital, Edmonton, for treatment which it was considered advisable to be undertaken in an active treatment Government hospital rather than the local general hospital. Five of these were medical cases and two were for psychiatric treatment. Eleven patients were transferred to Alberta Hospital, Ponoka, six for psychiatric treatment, one for medical care, and three patients for surgery following which they were returned to Deerhome. One patient from the Alberta Hospital, Ponoka, had surgery at the Red Deer General Hospital and returned to Ponoka after convalescence at Deerhome.

There were 39 routine admission chest X-rays of patients admitted to Deerhome. There were 323 diagnostic X-rays taken and a further 103 chest X-rays were taken at the Alberta School Hospital and Parsons Clinic.

Sixty-six patients were examined by the optometrist and 58 of these were fitted with glasses. There were 192 pairs of glasses repaired. Thirty-nine visits were made to the local ophthalmologists for special examination and treatment.

Ten patients had electroencephalogram examinations and 23 patients had electrocardiogram examinations.

Twenty patients were presented and one case was re-presented to the Eugenics Board all of whom were passed by the Board for surgery. Eugenics surgery was carried out on 20 patients at the Alberta School Hospital.

The Laboratory department did routine blood work and urinalyses on every patient in the institution once per year, as well as numerous tests ordered by the consultant physicians. All patients on tranquilizers and epileptic medications had urinalyses, white blood counts and haemoglobin estimations undertaken more frequently. A total of 8,344 laboratory tests were done at Deerhome. In addition, 1,321 tests were done by outside laboratories,

Dental Clinics were held regularly, 118 clinics in all. A total of 1,602 patients were seen, 220 fillings were done

and numerous treatments were carried out. There were 621 extractions, a proportion of which were carried out under local anaesthetic. Thirty-three patients required general anaesthetics which were carried out at the Alberta School Hospital. Nine patients were supplied with new dentures and 134 dental plates were repaired and adjusted.

Patients received routine administration of T.A.B.T. vaccine, poliomyelitis vaccine, Schick tests and diphtheria immunization where required. This involved some 2,353 immunization procedures.

There were 12 cases of infectious hepatitis. Four patients were found to have throat swabs showing diphtheria organisms, but no symptoms of this disease. Following treatment all were reported negative on further and repeated testing. Notifications were made to the Medical Officer of Health as required.

ACCIDENTS AND ELOPEMENTS

Thirty-eight fractures resulted from accidents.

During the year 22 patients eloped, ten being out overnight.

OCCUPATIONAL THERAPY

The total number of patients attending occupational therapy classes was approximately 285 daily; of these, approximately one-third were male patients.

Many articles were made in woodwork, leather, rugs, basketry, ceramics, embroidery, knitting and hand weaving, which were of a very high standard. In addition, there were many occupational therapy classes held on the wards for those patients incapable of doing intricate handwork or of concentrating for long periods, and for many aged and infirm patients who were unable to make the trip to Beaver House without being exposed to severe weather conditions and possible accidents due to icy sidewalks.

Forty-eight articles were entered in the Red Deer Fair for which 46 prizes were awarded.

The annual Tea and Sale held in November met with its usual outstanding success and all but a few small articles were sold.

Many patients were able to work for nominal payment at selected places of employment, under supervision. There were 20 to 30 boys working out on a daily basis, from 1st May to 1st October, and 33 boys worked out on a monthly basis for an average of seven months of the year. A total of 4,275 working days were accomplished on a daily basis and approximately 230 months for the boys who worked out on a monthly basis. A total of 38 girls worked out on a daily basis and nine on a monthly basis.

Approximately 398 male and female patients assisted with the routine work in various departments of Deerhome, such as laundry, kitchen, stores and male and female staff residences, as well as working at various seasonal occupations. The quality of their work varied tremendously but the basic need of the patient to fulfil some occupation was considered of primary importance. There is an urgent need for some form of financial incentive to be made available for patients who work in Deerhome.

RELIGIOUS SERVICES

With the exception of July and August, weekly non-denominational services were held each Sunday in Beaver Hall for the Protestant patients.

Roman Catholic Mass was held for Roman Catholic and Greek Catholic patients each month.

All clergy were most co-operative in visiting the very sick patients when requested.

PATIENTS RECREATION PROGRAM

An excellent recreation program was followed throughout the year with careful consideration being given to each patient's limitations, both mental and physical.

1. Walking parties (weather permitting) were carried out daily with as many patients participating as were physically fit to do so.

2. Physical fitness classes were carried out routinely with ingenious methods used to activate the wheelchair patients.

3. Swimming classes were attended three times weekly at the downtown swimming pool.

4. Skating took place on the Deerhome rink and a number of boys took part in hockey games.

5. Many of the patients were able to take part in bowling at the downtown bowling alley.

6. During the summer, regular bike riding parties were taken out. The patients also participated in tennis and badminton.

7. During the winter, tobogganing proved a favourite sport.

8. Other pastimes enjoyed in the Recreation Hall were square dancing and round dancing.

9. Inside games included bingo, table tennis, cribbage and card parties.

10. Other numerous entertainments enjoyed were film shows, professional hockey games downtown, professional football games in Edmonton, concerts both at Deerhome and downtown, bus rides and picnics, including trips to the Calgary Zoo and the Alberta Game Farm, and tours to see the Christmas lights. There were record hops and dances at Deerhome and many patients benefited from dancing instruction. The patients continued to derive much pleasure from television sets, radios, record players and pianos.

The Annual Deerhome Fair was held in August and approximately 956 patients were able to attend. The Annual Picnic was held on Dominion Day and approximately 800 patients attended. These occasions were especially enjoyable as there were very few patients who were not able to participate.

The Red Deer Parade and Fair was attended by 475 patients and 217 patients attended the afternoon performances.

The Christmas season brought many extra treats for the patients. Under the organization of the Recreation Director, the talented patients put on an excellent show for the rest of the patients. Several outside groups kindly visited Deerhome and contributed to the Christmas entertainments. These festivities continued over the New

Year's holiday. Approximately 205 patients were able to go home and spend Christmas holidays with their families.

The Recreation staff consisted of four men and seven women. There was a total of 119,056 attendances for special activities and the total yearly attendance, including all activities, was 165,419. Plans were made to expand the recreation program to motivate more of the patients with multiple disabilities and also to ensure that this type of patient would receive the maximum amount of fresh air and sunshine during the summer months.

GARDEN AND GROUNDS

The institution had 28½ acres of landscaped grounds containing 3,000 shrubs and trees, and two-and-a-half miles of sidewalks to be maintained by a staff of eight men. This proved to be inadequate during the summer months. Eighty-nine patients were occupied in the greenhouse and grounds during the summer and it was felt that more patients would have been able to benefit from this type of therapy if more summer relief staff had been available to give the required amount of supervision.

Eighteen thousand bedding plants were raised and transplanted in the grounds, making a delightful display for the enjoyment of both patients and visitors. Nine hundred potted plants were raised to make a year-round source of beauty within the institution.

There were 250½ tons of produce grown and stored in the root cellars for winter use.

KITCHEN

There were 45 personnel employed in the kitchen, of whom 22 were women and 23 were men. Thirteen patients helped in the kitchen and bakery. A total of 33,621 meals were served per week — 28,770 normal diets, 1,491 special diets and 3,360 staff meals. In addition 10,703 evening lunches per week were provided.

A total of 700 loaves of bread per day was baked on the premises, of which 200 loaves per day and 80 dozen buns per week were sent to the Alberta School Hospital.

LAUNDRY

Personnel included 26 women and six men. Patient help varied between 40 and 50 per day. Each week, 75,860 pounds of linen were laundered, an increase of 11,555 pounds per week over last year.

A six-day week was instituted in August, 1967, in order that adequate supplies of clean laundry would be available for the patients on the various wards.

SEWING ROOM

There were 23 female staff employed in this department who were assisted by three or four female patients. The largest percentage of the staff's time was spent in repairing clothing and linen. Three staff were responsible for fitting, altering and issuing uniforms.

STORES

Three male staff were employed in this department and the patient help varied from six to eight male patients a day. The amount of stores issued was \$557,648 which was an increase of approximately \$15,142 over last year. Cleaning materials cost \$31,722, an increase of \$3,022 over 1966.

STAFF

The health of the staff remained at a satisfactory level, and absenteeism due to sickness and accidents remained within normal limits.

All staff received T.A.B.T. vaccine and poliomyelitis vaccine routinely. This involved 1,957 immunization procedures.

Domestic staff and dietary staff had throat, nose and stool cultures done routinely.

Arrangements were made for routine chest X-rays to be taken of all presently employed staff, and of all staff on commencement of employment. A total of 795 X-rays were taken in this connection.

The staff turn-over for the year was comparable to previous years. Some difficulty was experienced in recruiting into male and female nursing positions requiring particular qualifications. Re-classification of some of these positions allowed recruitment of personnel with lesser qualifications.

Summer relief was adequate for the months of June, July and August but many employed in this capacity left early in September in order to resume university studies. Vacation leave for some staff had not been completed by this time and consequently a temporary staff shortage resulted.

Eighteen new permanent positions were created and five permanent positions were abolished.

IN-SERVICE EDUCATION PROGRAM

The In-Service Education Program was commenced in February, 1967. This program covered basic nursing care and was given for a period of six weeks. The instruction was both theoretical and practical. One staff member from each ward was assigned to each course. In 1967, five courses were held and these will be continued in 1968.

Longer indoctrination courses for new staff were planned with a view to holding courses of two-week duration at frequent intervals.

Courses of these types are essential to maintain good standards and to promote better care. Adequate instructional staff is essential.

VISITORS

The Director and Assistant Director of the Division of Mental Health visited periodically.

The Board of Visitors made an extensive tour of Deerhome.

The Scientific Planning Committee of the Canadian Mental Health Association met at Deerhome early in the year.

A conference of Medical Superintendents, Matrons, Business Managers, Personnel Staff and Accountants was held at Deerhome early in the year.

The Association of Psychiatric Nurses and the Red Deer Personnel Association held several meetings at Deerhome.

Special visits were made by several groups, including many university students, students from local schools, Red Cross nurses, representatives from Associations for Retarded Children, Safety Personnel and a Newspaper Association.

Medical students from the Alberta Hospital, Ponoka, attended from time to time.

TABLE 1
DEERHOME, RED DEER
MOVEMENT OF PATIENT POPULATION

	M	F	T	M	F	T
In residence 31st December, 1966	666	553	1219			
ADMISSIONS:						
From A.H., Ponoka	5	6	11			
From A.S.H., Red Deer	13	—	13			
From A.H., Edmonton	5	1	6			
Direct: Voluntary	15	16	31			
Re-admitted	2	1	3			
Returned from L.O.A.	268	169	437			
	308	193	501			
	308	193	501			
	974	746	1720			

SEPARATIONS:

Formal discharges	4	2	6			
On L.O.A.	273	179	452			
Deaths	9	7	16			
To A.H., Ponoka	3	8	11			
To A.H., Edmonton	3	4	7			
	292	200	492			
	292	200	492			
Total in Residence 31st December, 1967	682	546	1228			

TABLE 2
DEERHOME, RED DEER
ORIGINAL DIAGNOSIS ON ADMISSION TO MENTAL HOSPITAL

Idiocy	171	
Imbecile	596	
Moron	266	
Borderline Intelligence	32	
Mongol	60	
Mental Deficiency with Psychoneurosis	1	
Mental Deficiency, Unspecified	15	
Schizophrenia	61	
Manic Depressive	5	
Psychosis with Convulsive Disorder	12	
Psychosis with Organic Brain Disorder	2	
Traumatic Psychosis	1	
Mental Deficiency with Psychosis:		
Idiot	2	
Imbecile	28	
Moron	38	
Borderline	2	
Other	53	
	123	
Epilepsy	9	
Congenital Syphilis	2	
Neurosyphilis	2	
Post Encephalitis	1	
Syphilis	1	

*1360
This total includes 132 patients who were on Leave of Absence from Deerhome on 31st December, 1967.

TABLE 3
DEERHOME, RED DEER
CAUSES OF DEATH
ABRIDGED INTERNATIONAL CLASSIFICATION

Disease	Male	Female	Total
All Other Diseases Classified as			
Infective and Parasitic	1	—	1
Malignant Neoplasms, including Neoplasms of Lymphatic and Haematopoietic tissues	—	1	1
Vascular Lesions Affecting Central Nervous System	1	—	1
Arteriosclerotic and Degenerative			
Heart Disease	2	2	4
Pneumonia	4	4	8
All Other Diseases	1	—	1
TOTALS	9	7	16

TABLE 4
DEERHOME, RED DEER
CLASSIFICATION OF DEATHS ACCORDING TO ORIGINAL PSYCHIATRIC DIAGNOSIS

Disease	Male	Female	Total
Mental Deficiency	5	6	11
Mental Deficiency with Psychosis	2	1	3
Mental Deficiency with Epilepsy	1	—	1
Borderline Intelligence	1	—	1
TOTALS	9	7	16

UNIT FOR EMOTIONALLY DISTURBED CHILDREN LINDEN HOUSE, RED DEER

The general program of this facility was unchanged. Six children were admitted and eleven were discharged. Although there was a lesser demand for admission, this unit provides a valuable treatment program for emotionally disturbed children.

LINDEN HOUSE EIGHTH ANNUAL REPORT RED DEER

L. J. le Vann, L.R.C.P. Edin., L.R.C.S. Edin.,
L.R.F.P.S. Glas., Superintendent

IN RESIDENCE, ADMISSIONS, RE-ADMISSIONS, TRANSFERS, DISCHARGES

During 1967, 22 children resided at Linden House; 15 males and seven females. During the year there were five new admissions and one re-admission. Eleven children were discharged during the year; nine males and two females. One child was transferred from Linden House to Alberta School Hospital on the basis that an evaluation of this child in residence clearly indicated that she was mentally retarded rather than emotionally disturbed.

REQUESTS FOR ADMISSION

There were three applications received for admission which were not accepted on the basis that two of them, males, had an exceptional history of fire setting and it was felt that the facilities, particularly an open setting such as Linden House presented, would make the admission of these boys a highly dangerous one for the other children at Linden House. A third boy was refused admission as he had already exceeded the age limit for admission to Linden House.

The major problem of the children in residence at Linden House which emerged was that the vast majority of these children come from areas where there was great socio-economic impoverishment. This could not be taken in the strict literal sense that in every circumstance were these children all economically impoverished, although in many cases this was so, but in the main, these children presented a picture of a severely disorganized familial environment. Amongst the important factors were psychoneurotic parents, even to the extremes of psychosis, drunkenness in one or both of the spouses, families on welfare rolls, as well as parents who had not made the adjustment to intelligent parenthood.

The problem which Linden House continued facing was what to do with these children when they had reached a normal acceptable plateau of behaviour. Indeed many received sufficient educational rehabilitation to attend the schools in downtown Red Deer yet it was necessary to continue their care at Linden House, principally due to the fact that the home settings would quickly have undone any improvement which had been effected with these children.

THERAPY PROGRAM FOR CHILDREN

The therapy program attempted to cope with the antisocial reactions that these children developed as a result of hostile environmental factors. On this basis there were initial programs instituted for each child of individual psychotherapy and as a child developed greater inter-peer relationships, he was included in bi-weekly sessions of group ethics and the children's weekly parliament. In the latter meeting, children under the direction of their own prefect, discussed the week's events at Linden House, the behaviour of one another and methods which might be utilized by offenders to correct unsuitable attitudes and behaviour. Similarly, children whose behaviour was ideal and who made a genuine effort were singled out by the children themselves for praise, encouragement and reward by being elected to various governing offices insofar as Linden House was concerned.

Linden House which operated as an open door setting since its inception had the experience of two of the boys eloping. It was interesting to note that one of these boys represented a youngster who had been at Linden House for over five years, was initially a Ward of the Department of Child Welfare and had come to regard his stay at Linden House, after all these years, as quite hopeless, feeling that there was no place for him to go and that there was little future for him. He was easily encouraged to elope by another boy who had shown a chronic character disorder (socio-pathic personality). He too had been at Linden House over three years and gave as his reason, the futility of continuing here any longer.

During the year ten children had sufficiently recovered in their attitudes and habit patterns to be able to attend the regular Red Deer school system in the City of Red Deer.

TRAINING PROGRAM FOR NURSES AND ATTENDANTS

Linden House was incorporated at its onset as a continuing training area for the senior student nurses and attendants of Alberta School Hospital. They spent at least a three-month period at Linden House as part of their training program.

As in previous years, two weekly conferences were held with all the therapy and nursing staff at Linden House, during which the progress of each child was discussed, solutions to problems sought and new forms of treatment evolved.

EXTRA MURAL ACTIVITIES

Extra mural activities for the children were varied and interesting. They are enumerated as follows:

At Easter time all the children visited the Bentley Ski Hill and the boys went ice fishing at Pine Lake.

During the spring of the year the children had the opportunity of visiting the Fire Hall, Court House and Optical Laboratory in the City of Red Deer.

At the close of the school term in June the children travelled to Calgary as a special reward and spent the entire day at Happy Valley.

All the children attended summer camps and enjoyed weekly picnics and outings to Gull Lake, Burbank, Blindman River, Red Deer Canyon and Kin Canyon during clement weather.

All children spent at least one and some two days at the Red Deer Fair.

In the fall of the year a tour of the New Centennial Red Deer Public Library was enjoyed by the children.

During December many of the children were able to be taken around the city to see the Christmas lights and decorations and as well participated in outside activities and tobogganing.

VISITING BOARD AND VISITORS

During the year, as in previous years, Linden House received many visits from medical students, nurses and teacher groups. In addition, Linden House was honoured by several visits by the Honourable Minister of Health, as well as the Director and Assistant Director of the Division of Mental Health.

The Board of Visitors visited Linden House on October 17th and interviewed staff and children.

APPRECIATION

The Superintendent would like to express his appreciation to senior and junior staff members at Linden House, all of whom worked beyond the call of duty in the interest and concern they developed for their patients. There was little doubt that the home atmosphere, general friendliness and warmth shown towards the children by the staff members in no small way contributed to the children's marked and rapid improvement.

The Superintendent would also like to thank the Honourable Minister of Health for his sympathetic consideration for needs at Linden House and to the Director and Assistant Director, Division of Mental Health, for their understanding and close co-operation in all matters relating to the efficient function of this unit.

TABLE 1
LINDEN HOUSE, RED DEER
MOVEMENT OF POPULATION

	M	F	T	M	F	T
Children on Books of Linden House as of 31st December 1966	11	5	16			
ADMISSIONS:						
First Admissions—Voluntary	4	1	5			
Re-Admissions	—	1	1			
Transfers	—	—	—			
Total Number of Admissions	4	2	6			
				4	2	6
Total Number of Children on Books during 1967	15	7	22			
SEPARATIONS:						
Discharges	9	2	11			
Transfers (to A.S.H.)	—	1	1			
Total Number of Separations	9	3	12			
				9	3	12
Children on Books of Linden House at 31st December, 1967	6	4	10			

TABLE 2
LINDEN HOUSE, RED DEER
MENTAL STATUS OF FIRST ADMISSIONS, RE-ADMISSIONS AND TRANSFERS

MENTAL STATUS	FIRST ADMISSIONS			RE-ADMISSIONS			TRANSFERS			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T
Adjustment Reaction to Childhood	2	—	2	—	—	—	—	—	—	2	—	2
Juvenile Autism	1	—	1	—	—	—	—	—	—	1	—	1
Schizophrenic Reaction, Schizo-affective type	—	1	1	—	—	—	—	—	—	—	1	1
Chronic Brain Disorders with Behavioral Reaction	1	—	1	—	—	—	—	—	—	1	—	1
Acute Brain Syndrome Associated with Convulsive Disorder	—	—	—	—	1	1	—	—	—	—	1	1
TOTALS	4	1	5	—	1	1	—	—	—	4	2	6

TABLE 3
LINDEN HOUSE, RED DEER
AGE GROUP OF FIRST ADMISSIONS, RE-ADMISSIONS AND TRANSFERS

AGE GROUP	FIRST ADMISSIONS			RE-ADMISSIONS			TRANSFERS			TOTAL		
	M	F	T	M	F	T	M	F	T	M	F	T
5 - 7	1	—	1	—	—	—	—	—	—	1	—	1
8 - 9	—	—	—	—	—	—	—	—	—	—	—	—
10 - 12	2	1	3	—	1	1	—	—	—	2	2	4
13 - 14	1	—	1	—	—	—	—	—	—	1	—	1
TOTALS	4	1	5	—	1	1	—	—	—	4	2	6

THE EUGENICS BOARD

The Eugenics Board for the Province of Alberta held 10 meetings during the year 1967. These meetings were held at the Alberta Hospital, Edmonton; Alberta Hospital, Ponoka; Alberta School Hospital, Red Deer; and Deerhome, Red Deer. The dates of the meetings held during 1967 were as follows:

March 14	Alberta School Hospital, Red Deer
March 14	Deerhome, Red Deer
March 15	Alberta Hospital, Edmonton
May 17	Alberta Hospital, Edmonton
September 12	Deerhome, Red Deer
September 12	Alberta School Hospital, Red Deer
September 12	Alberta Hospital, Ponoka
September 13	Alberta Hospital, Edmonton
November 21	Alberta School Hospital, Red Deer
November 22	Alberta Hospital, Edmonton.

The Board considered a total of 89 cases, 82 of which were passed for surgery. Four cases were deferred because they did not fall within the scope of The Sexual Sterilization Act and three cases were represented. Of the 82 cases which were passed by the Board in accordance with The Sexual Sterilization Act (1955-C.311,S.5), 27 were male and 55 female. Of this number 19 were passed subject to their own consent.

Of the 82 cases passed by the Board during the year, 60 had first been examined at an Alberta Guidance Clinic, although some of these had been institutionalized prior to presentation. This group of 60 cases was made up of 23 males and 37 females.

OPERATIONS

Operations were performed on 97 cases during the year, 34 being male and 63 female. All of these operations were performed at the Alberta Hospital, Edmonton; Alberta Hospital, Ponoka; and Alberta School Hospital, Red Deer.

The surgical operations mentioned above were performed by the surgeons of the Board, Dr. J. Ross Vant of Edmonton and Dr. R. M. Parsons of Red Deer.

BOARD CHANGES

In May Mr. H. E. Panabaker of Calgary resigned as a member of the Eugenics Board. He was replaced on August 1 by Dr. W. R. N. Blair of Calgary.

APPRECIATION

As in previous years the Eugenics Board wishes to express thanks and sincere appreciation to the Director and Assistant Director, Division of Mental Health, to the Medical Superintendents and their staffs, to the surgeons, and to the Guidance Clinics for their co-operation in connection with the work of the Board.

TABULAR SUMMARY

A tabular summary of the work of the Provincial Eugenics Board to December 31, 1967, is appended.

CASES PRESENTED AND PASSED (TO DECEMBER 31, 1967)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	87	201	288	87	201	288
1934-1938	557	438	995	644	639	1283
1939-1943	339	299	638	983	938	1921
1944-1948	237	311	548	1220	1249	2469
1949-1953	187	239	426	1407	1488	2895
1954-1958	302	275	577	1709	1763	3472
1959	32	62	94	1741	1825	3566
1960	37	65	102	1778	1890	3668
1961	44	75	119	1822	1965	3787
1962	48	71	119	1870	2036	3906
1963	45	80	125	1915	2116	4031
1964	43	63	106	1958	2179	4137
1965	28	53	81	1986	2232	4218
1966	51	79	130	2037	2311	4348
1967	27	55	82	2064	2366	4430

OPERATIONS ONLY (TO DECEMBER 31, 1967)

Years	YEARLY TOTALS			CUMULATIVE TOTALS		
	Male	Female	Totals	Male	Female	Totals
1929-1933	48	158	206	48	158	206
1934-1938	198	240	438	246	398	644
1939-1943	122	151	273	368	549	917
1944-1948	87	124	211	455	673	1128
1949-1953	84	162	246	539	835	1374
1954-1958	207	160	367	746	995	1741
1959	40	50	90	786	1045	1831
1960	21	48	69	807	1093	1900
1961	53	52	105	860	1145	2005
1962	33	65	98	893	1210	2103
1963	31	61	92	924	1271	2195
1964	37	44	81	961	1315	2276
1965	45	47	92	1006	1362	2368
1966	42	65	107	1048	1427	2475
1967	34	63	97	1082	1490	2572

NATIONAL HEALTH GRANTS

Since 1948 the Federal Government has made a series of Health Grants available to the provinces. These relate to various specific problems such as General Public Health, Venereal Disease Control, Hospital Construction, etc. Within these grants the province may prepare a project in which it is proposed that a new health service may be financed. If the project comes within the terms of the federal regulations, it is approved by the federal authorities and the money becomes available to reimburse the province for its expenditure.

In most of the grants the project covers the entire cost of the service as outlined in the project but it is required by the federal authorities, that their grant be matched in certain Grants, Cancer Control, Hospital Construction, etc.

The following table shows the amount of these grants for 1967/68, the amount that was committed under the various projects, the amount actually expended and the percentage of the various grants that was expended.

NATIONAL HEALTH GRANTS
ALBERTA—1967-1968

Grant	Amount of Grant	Amount Committed	Amount Expended	Percentage of Grant Expended
Professional Training	\$ 188,774.00	\$ 185,208.86	\$ 178,597.60	94.6%
Mental Health	648,112.00	648,112.00	648,112.00	100%
Tuberculosis Control	117,579.00	117,579.00	117,579.00	100%
General Public Health	1,246,089.00	1,246,089.00	1,246,089.00	100%
Cancer Control	143,761.00	143,761.00	143,761.00	100%
Medical Rehabilitation and Crippled Children	174,455.00	97,105.00	75,832.09	43.4%
Child and Maternal Health	154,736.00	129,725.80	120,890.46	78.1%
	<u>\$2,673,506.00</u>	<u>\$2,567,580.66</u>	<u>\$2,530,861.15</u>	<u>94.6%</u>

NOTE: The Hospital Construction Grant has not been included under the above, as this information may be obtained from the separate publication covering the Annual Report of the Hospital Services Section.

CANADIAN RED CROSS BLOOD TRANSFUSION SERVICE IN ALBERTA

D. I. Buchanan, M.D., D.P.H., (Edmonton), E. W. Nation, M.B., M.R.C.P., (Calgary)

It is a pleasure to submit this annual report on the work of the Blood Transfusion Service in Alberta during 1967. As noted in Table 1, a grand total of 79,311 donations was received throughout the province. This constitutes a marked increase over 1966 when 74,614 bottles or plastic packs were collected.

TABLE 1
BOTTLES COLLECTED, 1967

Jan. 1 to Dec. 31 (inclusive)	Permanent and City Mobiles	Mobile Clinics	
Northern Alberta	25,235	16,641	= 41,876
Southern Alberta	23,002	14,433	= 37,435
	<u>48,237</u>	<u>31,074</u>	<u>79,311</u>

By the end of 1967, both the Edmonton and Calgary centres of the Blood Transfusion Service had switched over completely to plastic packs and equipment.

Blood Transfusions

As in 1966, over 90 hospitals still depend upon the Edmonton Depot for crossmatching services, and, similarly, some 49 hospitals in the southern part of the province rely on the Calgary Depot for crossmatched blood. It is probable that several of the major hospitals in Calgary will commence their own crossmatching service in 1968, and this will undoubtedly be of great advantage to their own patients. It has been proved in Edmonton that, where crossmatching is performed within a hospital itself, only 6% to 8% of the blood is ever returned unused to the Red Cross depot. In other words, if the blood is not needed for one patient, it can be re-crossmatched for another in the same hospital. The number of whole blood transfusions, etc., is given in Table 2.

TABLE 2
TRANSFUSIONS OF WHOLE BLOOD, 1967

Jan. 1 to Dec. 31 (inclusive)	No. Units Issued	Blood Transfusions Administered	Patients Transfused
Northern Alberta	35,685	27,342	9,498
Southern Alberta	36,658	20,193	10,005
	<u>72,343</u>	<u>47,535</u>	<u>19,503</u>

Plasma

A total of 402 five-litre flasks and 39 two-litre plastic packs of liquid plasma was shipped to the Connaught Laboratories from Edmonton during 1967, and 1,431 two-litre plastic packs were sent from Calgary.

Fresh Frozen Plasma and Cryoprecipitate

With the recent introduction of Factor VIII cryoprecipitate for the treatment of patients suffering from hemophilia A, there has been a reduced demand for fresh

frozen plasma, although there is still some need for fresh plasma or of relatively fresh plasma for the treatment of patients suffering from Factor IX deficiency or Christmas disease, and a limited number of other conditions.

A lot of time is consumed in making the anti-hemophilic cryoprecipitate and fresh frozen plasma, and it is well to remember that this has created an increasing demand for donors whose freshly taken blood has to be processed within a short time.

In Northern Alberta we issued 1,296 units of cryoprecipitate to hospitals, plus 128 units of fresh frozen plasma, and a total of 766 units of cryoprecipitate, plus 25 units of fresh frozen plasma was issued to hospitals by the Calgary Depot.

Rh Prevention Program

In last year's report we made particular mention of the great interest shown by the Honourable Dr. J. D. Ross and his staff in regard to the new Rh prevention program.

We are continuing the preparation of anti-Rh gamma globulin in conjunction with Dr. Albert Fisher of the Connaught Laboratories and the Western Canadian group who have participated in this study.

In 1967 there were approximately 180 new cases of anti-D or anti-Rh immunization in Alberta, and we are trying to establish the optimal dose and the best time to give the new anti-Rh gamma globulin preparation. At least another year will elapse before we can determine the probable value of this therapy, although at the present time almost all the larger cities in the Western Canadian provinces are taking part in this major research activity.

Rh and Antenatal Studies

A total of 37,710 antenatal, postnatal and related specimens was tested in 1967, as shown in Table 3.

TABLE 3
Rh, AND OTHER INVESTIGATIONS, 1967

Jan. 1 to Dec. 31 (inclusive)	Antenatal Specimens and Others Investigated
Northern Alberta	22,994
Southern Alberta	14,716
	<u>37,710</u>

In conclusion, we would like to express our sincere appreciation for the help of the many volunteers and for the advice of the committee members who are continually striving to improve this service in Alberta. Each member of the Blood Transfusion Service staff contributed significantly to the success of this large undertaking, and they merit great praise and appreciation.

PART II

ANNUAL REPORT

OF THE

Division of Vital Statistics

OF THE

**DEPARTMENT OF HEALTH
PROVINCE OF ALBERTA**

For The Year 1967

(Sixty-Third Annual Report)



CONTENTS

	Page
Summary	7
Population of Census Divisions	13
General Summary of Vital Statistics for Census Divisions and Incorporated Urban Places	17
Deaths by Place of Occurrence and Place of Residence	20
Deaths and Hospital Deaths by Occurrence and Residence for Census Divisions and Incorporated Urban Places	21
Cause of Death by Sex for Census Divisions (Including cities, towns and villages)	23
Cause of Death by Sex for Urban Places	32
Deaths by Cause and Sex, by Age, Alberta	42
Deaths by Cause and Sex, by Age, Edmonton	47
Deaths by Cause and Sex, by Age, Calgary	52
Deaths by Cause and Sex, by Marital Status and Age, Alberta	57
Deaths by Cause, Sex and Month of Death, Alberta	62
Infant Deaths for Census Divisions and Incorporated Urban Places	71
Causes of Infant Deaths by Sex and Age	73
Causes of Infant Deaths by Sex and Month of Death	76
Deaths According to International Intermediate List	77
Death Rates per 100,000	85
Cause of Death by Numbers and Rates of the Last Decennial Period	93
Deaths of Indians	94
Deaths of Registered Indians	103
Causes of Deaths, Infant Indians	112
Causes of Infant Death Registered Indians by Sex and Age	115
Live Births of Indians by Months	117
Live Births of Registered Indians by Months	117
Legitimate and Illegitimate Births of Indians	117
Legitimate and Illegitimate Births of Registered Indians	117
Live Births of Indians by Age of Parents	118
Live Births of Registered Indians by Age of Parents	119
Birth by Place of Occurrence	120
Live Births for Census Divisions and Incorporated Urban Places	121
Live Births by Month	123
Live Births for Census Divisions and Urban Places by Type of Attendance	124
Live Births by Age of Parents	126
Live Births by Age of Mother	127
Multiple Births	128
Live Births by Period of Gestation and Birth Weight, Alberta	129
Live Births by Age of Mother and Birth Weight, Alberta	130
Marriages by Months	132
Marriages by Ages	133
Marriages by Marital Status of Bridegroom, by Status of Bride	134
Marriages, Marital Status by Age of Bridegroom	134
Marriages, Marital Status by Age of Bride	134
Marriages by Birth Places	135
Marriages by Religious Denominations	136
Stillbirths	137
Ratio of Male to Female Births	138
Divorces and Nullities by Judicial Districts	139
Divorces and Nullities in Alberta	140
Population, Births, Marriages, Deaths and Rates for Years 1905-1967	141

DEFINITIONS

- Infant deaths** —deaths under 1 year of age.
- Neo-natal** —deaths under 28 days (4 weeks) of age.
- Maternal** —deaths due to delivery and complications of pregnancy, childbirth and the puerperium (Categories 640-689 International List).
- Stillbirths** —foetal deaths of 28 or more weeks' gestation.
- Perinatal deaths**—foetal deaths of 28 or more weeks' gestation plus infant deaths under 7 days (1 week) of age.
- Natural increase**—excess of births over total deaths. (Death figures do not include stillbirths.)

RATES

(Unless otherwise indicated computed as follows)

- Per 1,000 population; Live births, deaths, natural increase, marriages.
- Per 100,000 population; Causes of death, divorces.
- Per 1,000 live births; Infant and neo-natal deaths, stillbirths.
- Per 10,000 live births; Maternal deaths.
- Per 1,000 total births (live- and still-born): Perinatal deaths.

DIVISION OF VITAL STATISTICS

J. COLVILLE, Director

INTRODUCTION

In comparing the Vital Statistics rates of the Province for the year 1967, with those of the previous year, it is noted there are increases in the marriage, stillbirth and divorce rates and decreases in the birth, death, infant death, neo natal death, peri natal death and maternal death rates. The natural increase of births over deaths was 14.2 as compared to 14.3 for 1966.

POPULATION

The population of the Province for the year 1967 has been estimated by the Dominion Bureau of Statistics as 1,490,000. All rates in this report are based on that figure. Between pages 12 and 13 there is a map of the Province by census divisions and commencing on page 13 a table of population by census divisions. A table of the estimated population by sex and age group for 1967 is shown on page 16.

BIRTHS

Although the birth rate of 20.6 per 1,000 population for 1967 is a decrease of .3 under the rate for 1966, the number of births to residents of the Province in 1967, exceeded the total for the previous year by 99. This phenomenon is due to increased population. Of the total births, 15,682 were males and 15,009 females, constituting a sex ratio of 1,044 male to 1,000 female births. The births of 2,286 Indians were registered which is an increase of 96 over 1966. Indian births make up approximately 7% of the total births. Seventy percent of the births occurred in urban places of 1,000 population and over, 99.2% occurred in hospitals, 30,450 were delivered by doctors, 84 by nurses, 66 by midwives and 91 were unattended. There were 299 sets of twins born and 30,721 confinements. Of the total births, 3,518 or 11.4% were illegitimate, an increase of 320 over 1966. The figure of illegitimate births includes 941 births to Indians and the illegitimate birth rate for Indians was 41.1. The ratio of births over deaths was 3.22.

The number of births to residents of the cities in the Province was as follows: Calgary, 7,418; Camrose, 155; Drumheller, 73; Edmonton, 8,726; Grande Prairie, 281; Lethbridge, 627; Medicine Hat, 396; Red Deer, 497; and Wetaskiwin, 117.

The following table shows the most recent birth rates for Canada and certain other Countries:

Canada	18.2	Ireland (Republic)	21.2
Newfoundland	25.7	United States	17.9
Prince Edward Island	18.8	Australia	19.4
Nova Scotia	18.9	New Zealand	22.4
New Brunswick	19.9	Denmark	18.4
Quebec	17.3	Finland	16.5
Ontario	17.8	France	16.8
Manitoba	17.8	Italy	18.1
Saskatchewan	18.8	Austria	17.4
Alberta	20.6	Norway	18.0
British Columbia	16.9	Netherlands	18.9
Yukon	25.7	Portugal	21.1
Northwest Territories	41.7	Spain	21.1
England and Wales	17.2	Sweden	15.4
Scotland	18.6	Switzerland	17.7
Northern Ireland	22.4	Western Germany	17.3

MARRIAGES

The number of marriages registered in 1967, was 12,903, as compared to 11,879 for 1966, with a corresponding increase in the rate from 8.1 to 8.7 per 1,000 population. This is the fifth consecutive year in which the number and rate of marriages increased over that of the previous year. As in the previous year, the highest number of marriages registered in a single month occurred in July, when 1,589 marriages were registered and the lowest number registered occurred in January when 464 marriages were registered. On the lower end of the scale, 4,369 brides and 1,055 grooms were under 20 years of age and on the higher end, 22 brides and 60 grooms were 75 years of age and over. Of the grooms, 11,474 were bachelors, 49 widowers and 1,010 divorced and of the brides, 11,232 were spinsters, 649 widows and 1,022 divorcees.

The number of marriages registered in the cities of the Province was as follows: Calgary, 3,228; Camrose, 111; Drumheller, 63; Edmonton, 4,141; Grande Prairie, 134; Lethbridge, 422; Medicine Hat, 305; Red Deer, 272; and Wetaskiwin, 86.

The following table shows the most recent marriage rates for Canada and certain other Countries:

Canada	8.1	Ireland (Republic)	6.1
Newfoundland	8.0	United States	9.7
Prince Edward Island	7.4	Australia	8.5
Nova Scotia	8.2	New Zealand	8.6
New Brunswick	8.8	Denmark	8.6
Quebec	7.9	Finland	8.8
Ontario	8.2	France	6.9
Manitoba	8.2	Italy	7.3
Saskatchewan	7.9	Austria	7.7
Alberta	8.7	Norway	7.3
British Columbia	8.2	Netherlands	9.1
Yukon	8.9	Portugal	8.4
Northwest Territories	6.2	Spain	7.2
England and Wales	8.0	Sweden	7.4
Scotland	8.1	Switzerland	7.4
Northern Ireland	7.3	Western Germany	8.0

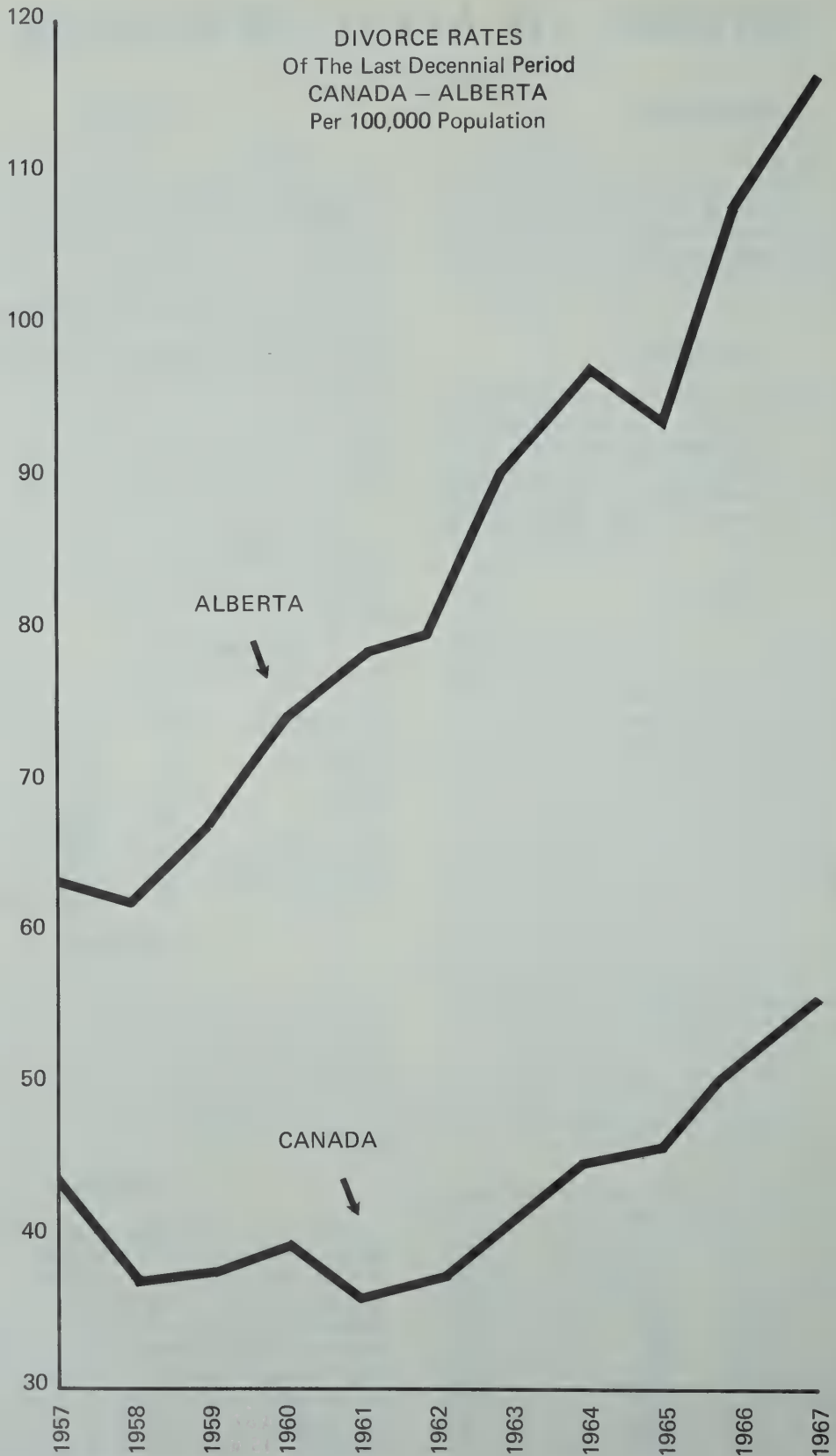
DIVORCES

There were 1,736 decrees of divorce and 21 decrees of nullity granted in 1967, as compared to 1,567 decrees of divorce and 19 decrees of nullity granted during 1966, with a corresponding increase in the divorce rate per 100,000 population from 107.1 to 116.5. Of the total divorces, 623 were granted to husbands and 1,113 to wives and of the nullities, 7 to husbands and 21 to wives.

DEATHS

There was a favourable decrease in the number of deaths to residents in 1967, as compared to the previous year. In 1967, there were 9,523 deaths registered as compared to 9,677 and there was a corresponding reduction in the rate from 6.6 to 6.4. The highest loss of life occurs at the extremities of the life span. During 1967, 615 of the decedents were under one year of age and 5,721 were sixty-five years and over. Of the decedents, 2,101 were single, 4,673 married and 2,707 were divorced or widowed, 7,915 were attended by a doctor, 9 by a nurse

DIVISION OF VITAL STATISTICS



and 1,599 investigated by a coroner. Autopsies were performed on the bodies of 1,702 of the 4,893 decedents who died in hospitals, and on 585 of the 1,984 decedents who died outside a hospital. The highest number of deaths for a single month occurred in January when 847 deaths were registered and the lowest number occurred in May when 606 deaths were registered. Of the total number of deaths, 5,895 were males and 3,628 females, giving a sex ratio of 1,624 male to 1,000 female deaths.

The five leading causes of death in chronological order for 1967 were; heart disease, cancer, violent and accidental deaths, vascular lesions affecting the central nervous system and pneumonia (all forms). Heart diseases accounted for 2,977 deaths; cancer, 1,739; violence and accidents, 1,029; vascular lesions of the central nervous system, 1,019, and pneumonia, 299. Deaths in the violent and accidental group, included motor vehicle accidents, 433; other transport accidents, 30; accidental poisoning, 42; accidental falls, 132; accidents caused by machinery, 21; accidents caused by fire and explosion, 54; other accidental burns, 3; accidents caused by firearm, 14; accidental drowning, 57; other accidental causes, 69; suicides, 137, and homicides, 37.

The number of deaths registered in the cities of the Province was as follows: Calgary, 2,117; Camrose, 185; Drumheller, 64; Edmonton, 2,122; Grande Prairie, 91; Lethbridge, 324; Medicine Hat, 254; Red Deer, 157; and Wetaskiwin, 46.

The following table shows the most recent death rates for Canada and certain other Countries;

Canada	7.4	Ireland (Republic)	10.7
Newfoundland	6.2	United States	9.4
Prince Edward Island	9.5	Australia	8.7
Nova Scotia	8.8	New Zealand	8.4
New Brunswick	7.9	Denmark	10.3
Quebec	6.6	Finland	9.4
Ontario	7.7	France	10.8
Manitoba	7.9	Italy	9.7
Saskatchewan	7.8	Austria	13.0
Alberta	6.4	Norway	9.2
British Columbia	8.3	Netherlands	7.9
Yukon	4.9	Portugal	10.0
Northwest Territories	7.5	Spain	8.7
England and Wales	11.2	Sweden	10.1
Scotland	11.5	Switzerland	9.0
Northern Ireland	9.8	Western Germany	11.2

MATERNAL DEATHS

A total of 5 maternal deaths were registered in 1967, one less than in 1966, and there was a corresponding decline in the rate from 2.0 to 1.6 per 10,000 live births.

MATERNAL DEATH RATES PER 10,000 LIVE BIRTHS

Canada	2.4	Manitoba	1.7
Newfoundland	2.3	Saskatchewan	2.2
Prince Edward Island	—	Alberta	1.6
Nova Scotia	2.1	British Columbia	1.5
New Brunswick	2.4	Yukon	—
Quebec	3.3	Northwest Territories	—
Ontario	2.3		

INFANT DEATHS

There was a gratifying decrease in the number of children who died under one year of age; 615 were registered in 1967, as compared to 640 in 1966, and there was a corresponding decline in the rate from 20.9 to 20.0 per 1,000 live births. Of the total infant deaths, 329 were males and 286 females.

INFANT DEATH RATES PER 1,000 LIVE BIRTHS

Canada	22.0	Ireland (Republic)	24.5
Newfoundland	28.6	United States	22.1
Prince Edward Island	23.4	Australia	18.3
Nova Scotia	22.8	New Zealand	17.7
New Brunswick	25.1	Denmark	17.0
Quebec	23.1	Finland	14.4
Ontario	19.7	France	21.6
Manitoba	21.6	Italy	34.3
Saskatchewan	25.8	Austria	28.1
Alberta	20.0	Norway	16.8
British Columbia	21.4	Netherlands	14.7
Yukon	23.4	Portugal	64.7
Northwest Territories	62.0	Spain	26.7
England and Wales	18.3	Sweden	12.6
Scotland	21.0	Switzerland	17.1
Northern Ireland	23.5	Western Germany	23.6

STILLBIRTHS

There was a decrease of 7 stillbirths (20+ weeks gestation) under the previous year and an increase of 6 stillbirths (28+ weeks gestation); 350 stillbirths (20+ weeks gestation) and 286 (28+ weeks gestation) were registered in 1967, as compared to 357 (20+ weeks) and 280 (28+ weeks gestation) for 1966. The stillbirth rate (20+ weeks gestation) was 11.4 and for (28+ weeks gestation) 9.3 per 1,000 live births. A table of the stillbirths by sex and period of gestation is printed on page 137. (Table 43)

ADMINISTRATION

The Vital Statistics Act, the Marriage Act and the Regulations providing for the licensing of embalmers are administered by the Director, Division of Vital Statistics.

Under the provisions of the Vital Statistics Act, the administrative procedure necessary for matters of civil registration is provided. There are approximately 170 District Registrars located in the larger centres of the Province, whose duties are to acquire the registration of each vital event (birth, stillbirth, marriage and death) which occurs within their district for recording and transmission to the Division on a weekly basis. In addition, decrees of dissolution and annulments of marriage, adoptions and legal changes of name are received for recording. All registrations are edited, microfilmed, etc., arranged and bound in a systematic manner and continuous indexes prepared. Certified copies, photocopies of original registrations, certified extracts, certificates and verifications are issued to applicants or agencies upon receipt of the prescribed fee. Verifications and photocopies of registrations are also supplied free of charge to other government departments and certain authorized agencies.

Listed below is a summary of work processed under the provisions of The Vital Statistics Act, during 1967:

Births registered	30,719
Stillbirths registered	366
Marriages registered	12,916
Deaths registered	9,605
Certificates of Birth issued	50,640
Certificates of marriage issued	19,542
Certificates of death issued	6,488
Searches—Public	780
Gov't Depts., Social Agents, etc.	5,046
Legal Changes of Name recorded	602
Legitimations	309
Delayed registrations of birth	854
Adoptions registered	1,963

Under the Marriage Act, the Division provides administrative procedure for the appointment of marriage licence issuers, marriage commissioners and the registration

DIVISION OF VITAL STATISTICS

of clergymen authorized to perform marriages in the Province. Approximately 145 marriage licence issuers are located in the larger centres of the Province, whose duties are to issue marriage licences in accordance with the provisions of The Marriage Act.

The following summary shows work processed under the provisions of The Marriage Act during the year 1967:

Marriage licences issued	13,159
Clergymen registered	2,838
Marriage Commissioners registered	37

Under the provisions of the Regulations providing for the licensing of embalmers, the Division licenses embalmers and registers apprentice embalmers. During the year 1967, 230 embalmers were licensed and 21 apprentice embalmers registered.

REVENUE AND EXPENDITURE
For the fiscal year ending March 31st, 1968

MARRIAGE ACT

Marriage Licences	\$ 62,519.00
-------------------	--------------

VITAL STATISTICS ACT

Birth Certificates	99,660.00
Marriage Certificates	38,830.00
Death Certificates	13,412.00
Certified Copies	1,808.00
Micro Film Transcriptions	4,527.50
Certificate of Authority to Register	1,632.00
Change of Christian Name	515.00
Legitimation	612.00
Embalmers Licences	1,080.00
Apprentice Embalmers Licences	95.00
Search Fees	782.00
Marriage Fees	3,269.00
Sundries	3,350.53

\$ 169,573.03

TOTAL REVENUE

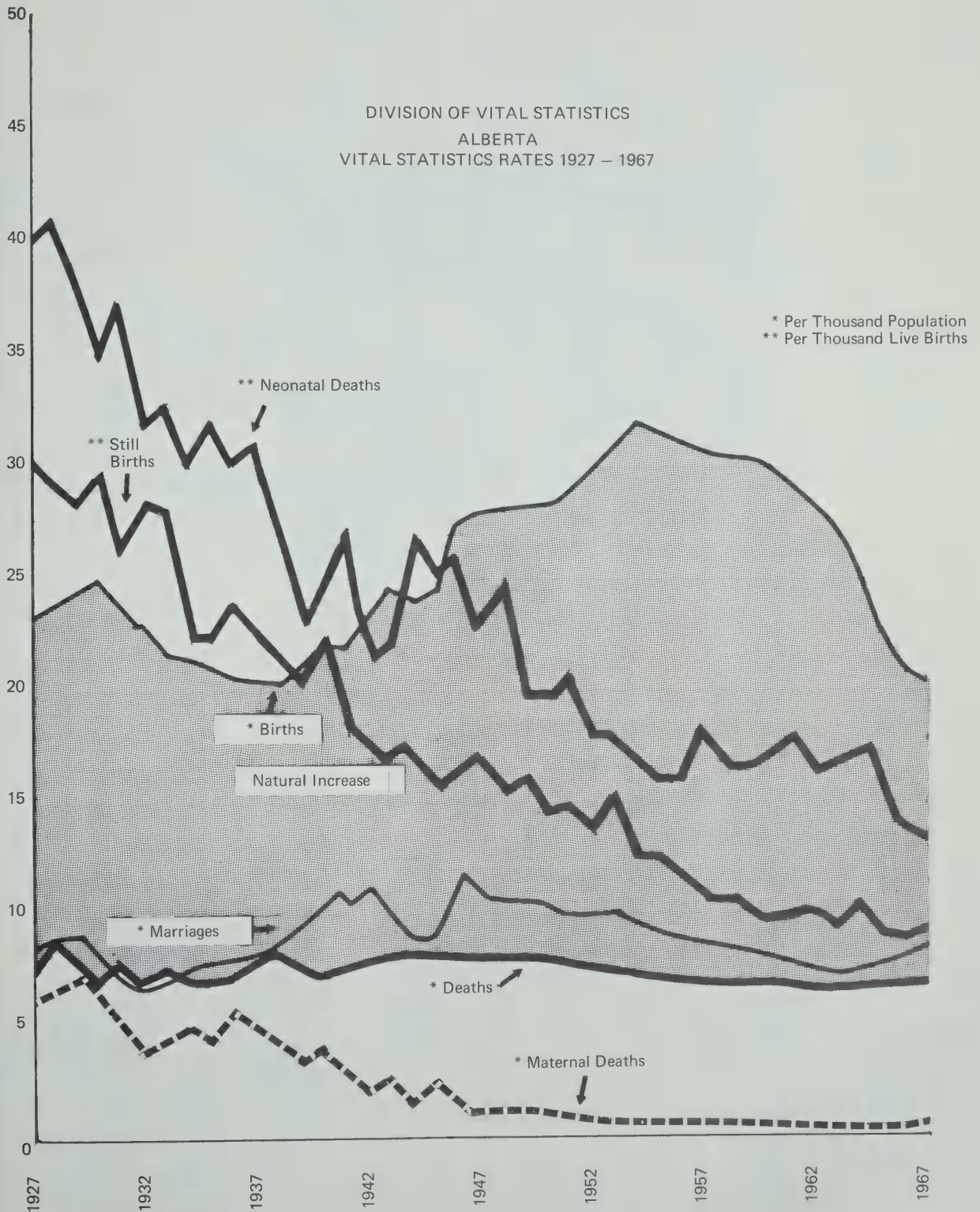
\$ 232,092.03

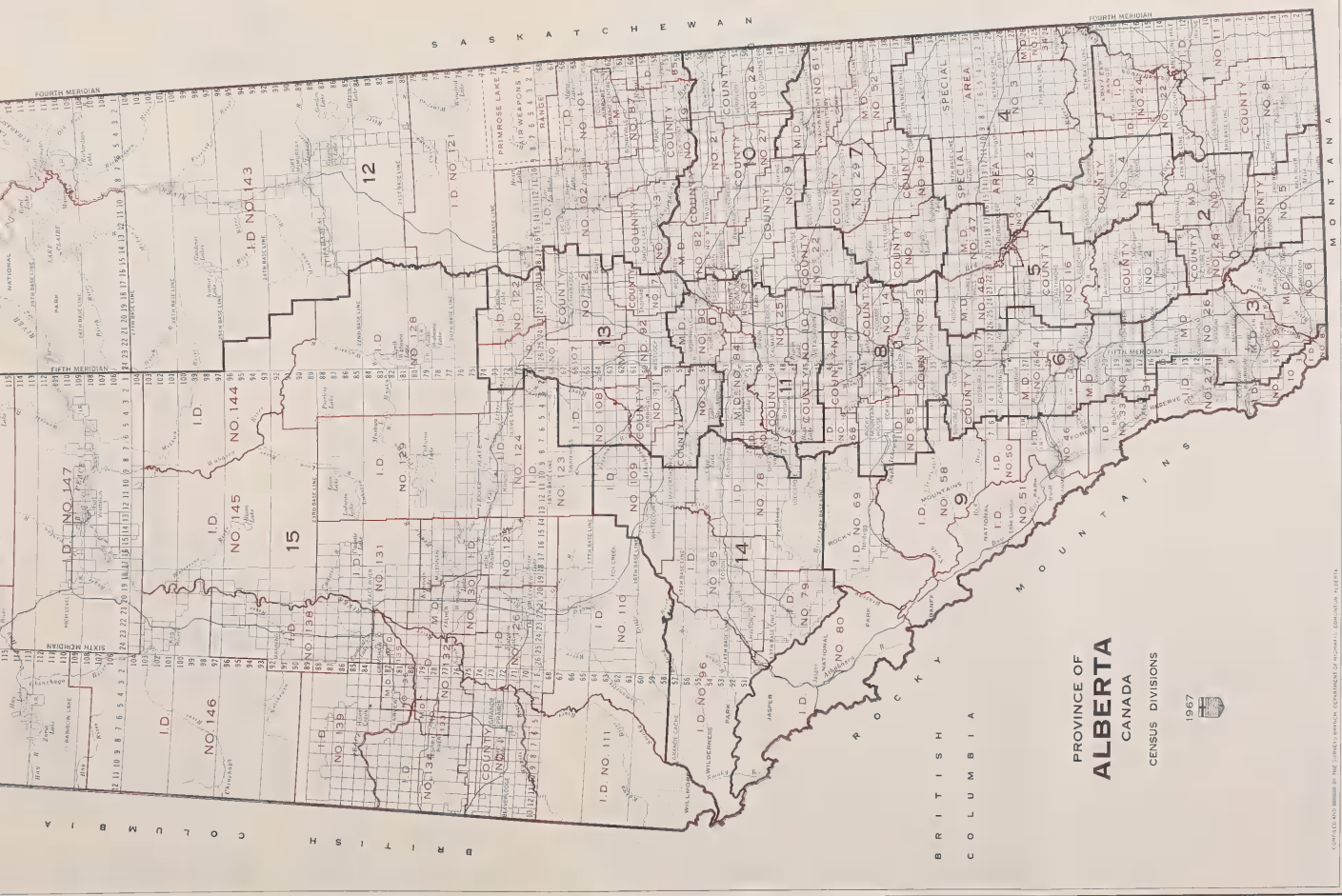
EXPENDITURE

Salaries	\$ 111,853.50
Office Expenditure	
Printing and Stationery	11,046.30
Furnishings, Equipment and Tools	635.82
Freight, Express & Cartage	71.65
Fees and Commissions	7,067.82
Postage	6,059.94
Repairs, Office Furniture and Equipment	46.55
Repairs, Office Equipment	316.23
Telephones and Telegraphs	54.16
Rentals	300.00
Travelling Subsistence	155.83

\$ 137,607.80

DIVISION OF VITAL STATISTICS
ALBERTA
VITAL STATISTICS RATES 1927 - 1967





PROVINCE OF
ALBERTA
CANADA
CENSUS DIVISIONS

1967





POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY
MUNICIPALITIES FOR CENSUS YEARS, 1961 AND 1966

Subdivision	1966	1961	Subdivision	1966	1961
ALBERTA	1,463,203	1,331,944	Division No. 4	14,224	15,020
Division No. 1	38,858	39,140	34. Acadia	896	965
11. I.D.	3,792 (1)	4,228	Special Area No. 2 (Barry Creek - Sullivan Lake Area)	3,288	3,805
22. I.D.	472	553	Special Area No. 3 (Sounding Creek - Neutral Hill Area)	4,686 (1)	4,994
Forty Mile, County No. 8	4,104 (2)	4,716			
Army Experimental Range (I.D. 24)	645	786	Towns:		
Cities:			Hanna	2,633	2,645
Medicine Hat	25,574	24,484	Oyen	846	780
Towns:			Villages:		
Bow Island	1,160	1,122	Cereal	191 (1)	195
Irvine	209 (1)	240	Chinook	95	114
Redcliff	2,141	2,221	Consort	594	557
Villages:			Empress	360	405
Burdett	207 (2)	229	Veteran	278	239
Foremost	554 (2)	561	Youngstown	357	321
Division No. 2	82,719	83,306	Division No. 5	35,987	38,115
14. Taber	6,871	7,349	42. I.D.	3,403 (1,2)	4,370
Newell, County No. 4	5,898	6,038	47. Starland	2,535 (2)	2,907
Warner, County No. 5	4,386 (1)	4,991	48. Kneehill	6,290 (1,3)	7,008
Lethbridge, County No. 26	9,506 (2)	11,184	Vulcan, County No. 2	4,330 (1,4)	5,018
Cities:			Wheatland, County No. 16	5,062 (4)	5,570
Lethbridge	37,186 (2)	35,454	Indian Reserves	1,714	1,612
Towns:			Cities:		
Bassano	827	815	Drumheller	3,574 (1)	2,931
Brooks	3,354	2,827	Towns:		
Coaldale	2,541 (2)	2,592	Gleichen	411	426
Milk River	861 (1)	801	Strathmore	994 (4)	924
Picture Butte	1,013 (2)	978	Three Hills	1,452 (1)	1,491
Raymond	1,950	2,362	Trochu	780 (1)	671
Taber	4,584	3,951	Vulcan	1,505	1,310
Vauxhall	934	942	Villages:		
Villages:			Acme	335	328
Barons	270	345	Arrowwood	174	195
Coutts	427	469	Carbon	374 (1)	371
Duchess	233	218	Carmangay	246 (4)	297
Grassy Lake	226	274	Champion	357	419
Nobleford	345 (2)	309	Cluny	171	174
Rosemary	221	210	Craigmyle	98	107
Stirling	390	468	Delia	274	287
Tilley	250	257	Hussar	235	213
Warner	446	472	Linden	210 (3)	-
Division No. 3	29,592	30,967	Lomond	215	244
6. Cardston	4,259 (1)	4,905	Milo	154 (1)	167
9. Pincher Creek	2,739 (2)	3,240	Morrin	272	316
26. Willow Creek	4,317 (3)	4,863	Munson	39	82
Indian Reserves	4,102	3,889	Rockyford	281	288
Towns:			Rumsey	108	123
Cardston	2,721	2,801	Standard	264	266
Claresholm	2,569 (3)	2,143	Torrington	130 (3)	-
Fort MacLeod	2,709	2,490	Division No. 6	369,140	317,989
Granum	295	290	31. Foothills	6,455 (1,2)	7,896
Magrath	1,220 (1)	1,338	44. Rocky View	8,522 (2,3)	10,748
Nanton	940 (3)	1,054	Mountain View, County No. 17	■,656 (4)	9,348
Pincher Creek	2,882 (2)	2,961	Indian Reserves	771	511
Stavelly	292	349	Cities:		
Villages:			Calgary	330,575 (2)	249,641
Cowley	163	127	Towns:		
Glenwood	194 (1)	274	Black Diamond	858	1,043
Hill Spring	190	243	Bowness	(2)	9,184
			Didsbury	1,586	1,254
			Forest Lawn	(2)	12,263

DIVISION OF VITAL STATISTICS

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY
MUNICIPALITIES FOR CENSUS YEARS, 1961 AND 1966. (Continued)

Subdivision	1966	1961	Subdivision	1966	1961
Towns: (Cont'd)			Villages:		
High River	2,239	2,276	Alix	636	631
Montgomery	(2)	5,077	Bentley	637 (2)	588
Okotoks	922	1,043	Blackfalds	729 (2)	477
Olds	2,999 (4)	2,433	Bowden	610 (4)	437
Sundre	831 (4)	853	Caroline	294	321
Villages:			Clive	238	251
Airdrie	778 (3)	524	Delburne	391	450
Beiseker	404 (3)	360	Eckville	716 (2)	580
Blackie	156	184	Elnora	191	214
Carstairs	761	665	Gull Lake (6)	48 (2)	40
Cayley	133	146	Mirror	433	577
Cochrane	819 (3)	857	Norglenwold (6)	23 (5)	-
Cremona	191	221	Penhold	370	319
Crossfield	582	593			
Irricana	104	167	<u>Division No. 9</u>	18,195	20,274
Longview	173 (1)	-	8. I.D.	(1)	80
Turner Valley	625	702	10. I.D.	1,664 (1,2)	1,844
<u>Division No. 7</u>	40,833	40,837	27. I.D.	132	133
52. Provost	2,944 (1)	3,328	33. I.D.	32	34
61. Wainwright	4,454 (2,3)	4,847	46. I.D.	1,651 (4)	3,076
62. Flagstaff	5,977 (4,5)	6,355	50. I.D.	45	41
Stettler, County No. 6	5,640 (6)	5,968	58. I.D.	522 (5)	534
Paintearth, County No. 18(7)	3,227	3,278	69. I.D.	179 (6)	505
Towns:			78. I.D. (pt.) (7)	73 (6)	-
Gastor	1,090	1,025	Banff National Park		
Coronation	811	864	(I.D. 51)	3,381	4,101
Daysland	632	539	Banff (not inc.) (8)	2,896	3,429
Hardisty	597 (5)	582	Jasper National Park		
Killam	866 (4)	552	(I.D. 80)	2,791	2,902
Provost	1,328	1,022	Jasper (not inc.) (9)	2,505	2,360
Sedgewick	760 (4)	655	Waterton Lakes Nat'l		
Stettler	3,988 (6)	3,638	Park (I.D. 8)	266	344
Wainwright	3,867 (2)	3,351	Indian Reserves	1,376	1,441
Villages:			Towns:		
Alliance	291	291	Blairmore	1,779	1,980
Amisk	134 (1)	127	Coleman	1,507 (2)	1,713
Big Valley	378	461	Villages:		
Botha	134 (6)	112	Bellevue	1,174	1,323
Chauvin	362 (3)	395	Canmore	1,445 (4)	-
Czar	222	196	Frank	178	223
Donalda	271	289	Ghost Lake (10)	-	-
Edgerton	345	295	<u>Division No. 10</u>	70,211	70,177
Forestburg	669	677	82. Lamont	5,872 (1)	6,754
Gadsby	84	98	Beaver, County No. 9	6,009 (2)	6,476
Galahad	174 (4)	231	Two Hills, County		
Halkirk	177	172	No. 21 (3)	5,528 (4)	6,205
Heisler	214 (4)	214	Camrose, County No. 22(5)	8,285 (6,7)	9,041
Hughenden	274	294	Vermilion River, County		
Irma	430	425	No. 24 (8)	8,380 (9)	8,862
Lougheed	252 (4)	217	Minburn, County No. 27(10)	5,591 (11)	6,181
Rochon Sands (8)	2	28	Elk Island National		
Strome	239 (5)	311	Park (I.D. 97)	63	69
<u>Division No. 8</u>	83,912	76,533	Cities:		
65. I.D.	5,612	5,532	Camrose	8,362 (7)	6,939
68. I.D.	108 (1)	124	Lloydminster (pt) (12)	3,767 (9)	2,944
Ponoka, County No. 3	8,392 (1)	8,688	Towns:		
Lacombe, County No. 14	8,367 (2)	8,725	Bashaw	697 (7)	614
Red Deer, County No. 23(3)	12,943 (4,5)	13,477	Mundare	564	603
Indian Reserves	1,736	1,246	Tofield	952 (2)	905
Cities:			Two Hills	1,056 (4)	826
Red Deer	26,171 (4)	19,612	Vegreville	3,598 (11)	2,908
Towns:			Vermilion	2,685	2,449
Innisfail	2,531 (4)	2,270	Viking	1,146 (2)	1,043
Lacombe	3,035	3,029	Villages:		
Ponoka	4,421 (1)	3,938	Andrew	525	601
Rimbey	1,502 (1)	1,266	Bawlf	220	203
Rocky Mtn. House	2,446	2,360	Bittern Lake	80 (7)	76
Sylvan Lake	1,332	1,381	Bruderheim	290 (1)	299

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY
MUNICIPALITIES FOR CENSUS YEARS, 1961 AND 1966. (Continued)

Subdivision	1966	1961	Subdivision	1966	1961
Villages: (Cont'd)			Division No. 12	50,635	47,310
Chipman	183	174	85. I.D.	347	338
Derwent	261	281	87. Bonnyville	10,979 (1)	10,209
Dewberry	198 (9)	179	101. I.D.	1,825	1,951
Edberg	167 (7)	179	102. I.D.	4,926 (2)	4,840
Ferintosh	156 (7)	174	121. I.D.	309	323
Hairy Hill	136	173	143. I.D.	1,792 (3)	1,650
Hay Lakes	196 (7)	233	Smoky Lake, County No. 13	4,028 (4)	4,913
Holden	503	556	St. Paul, County No. 19 (5)	6,710 (6)	7,421
Innisfree	314	291	Wood Buffalo Nat'l Pk.(pt)	231	86
Kitscoty	364	326	Indian Reserves	3,704	3,229
Lamont	835	705			
Lavoy	118	131	Towns:		
Mannville	683 (11)	632	Bonnyville	2,237 (1)	1,736
Marwayne	351	379	Cold Lake	1,289 (1)	1,307
Minburn	143	164	Elk Point	726 (6)	692
Myrnam	460 (4)	441	Fort McMurray (7)	2,614 (3)	1,186
New Norway	220	263	Grand Centre	1,731 (1)	1,493
Paradise Valley	174 (9)	-	Lac La Biche	1,490	1,314
Rosalind	222 (6)	-	St. Paul	3,543 (6)	2,823
Ryley	438	469	Smoky Lake	871 (4)	626
Willingdon	419	429			
Division No. 11	476,053	410,679	Villages:		
77. I.D.	2,022 (1)	2,384	Bonnyville Beach (8)	1 (1)	-
84. Stony Plain	8,846 (2,3)	9,238	Glendon	350 (1)	315
90. Sturgeon	15,926 (2,4)	17,837	Plamondon	195 (2)	-
Wetaskiwin, County No. 10	8,435 (5)	8,701	Vilna	344	400
Strathcona, County No. 20 (6)	16,185 (2,6)	12,075	Warspite	119	153
Leduc, County No. 25 (7)	10,294 (8,9)	10,647	Waskatenau	274	305
Indian Reserves	2,555	2,072	Division No. 13	44,142	45,431
Cities:			92. Westlock	7,378 (1)	7,864
Edmonton	376,925 (2)	281,027	107. I.D.	1,565 (2)	1,571
Wetaskiwin	6,008 (5)	5,300	108. I.D.	629	636
Towns:			122. I.D.	424 (2)	613
Beverly	(2)	9,041	Thorhild, County No. 7	4,324 (3,4)	5,096
Calmar	600 (9)	700	Barrhead, County No. 11	5,467	5,759
Devon	1,283	1,418	Athabasca, County No. 12	6,147 (3,5)	6,792
Drayton Valley	3,352 (1)	3,854	Lac Ste. Anne, County		
Fort Saskatchewan	4,152 (6)	2,972	No. 28 (6)	6,687 (7,8)	7,151
Jasper Place	(2)	30,530	Indian Reserves	353	432
Leduc	2,856 (9)	2,356	Towns:		
Lodgepole	207	508	Athabasca	1,551	1,487
Morinville	995	935	Barrhead	2,592	2,286
St. Albert	9,736 (4)	4,059	Mayerthorpe	916 (8)	663
Stony Plain	1,397	1,311	Redwater	1,041	1,135
			Westlock	2,685 (1)	1,838
Villages:			Villages:		
Betula Beach (10)	-	7	Alberta Beach (9)	143 (8)	135
Bon Accord	147 (4)	-	Boyle	437 (5)	346
Breton	447 (9)	428	Castle Island (9)	-	-
Crystal Springs (10)	13 (5)	13	Clyde	256	259
Edmonton Beach (10)	41	20	Fort Assiniboine	187	216
Entwistle	345	411	Island Lake (9)	9	12
Gibbons	230	192	Nakamun Park (9)	2 (7)	-
Golden Days (10)	6 (8)	-	Onoway	375 (8)	302
Itaska Beach (10)	1	2	Radway	158	183
Kapasiwin (10)	-	2	Ross Haven (9)	17 (7)	-
Lakeview (10)	2	12	Sandy Beach (9)	20	4
Legal	572 (4)	524	Sangudo	314 (8)	325
Ma-Me-O Beach (10)	103	142	Sunset Point (9)	18	14
Millet	418	403	Thorhild	430 (4)	312
New Sarepta	173	184	Val Quentin (9)	8 (7)	-
Point Alison (10)	7	6	West Cove (9)	6 (7)	-
Seba Beach (10)	155 (3)	113	Yellowstone (9)	3 (7)	-
Silver Beach (10)	31	14			
Spruce Grove	598 (3)	465			
Thorsby	583 (9)	491			
Warburg	407 (9)	285			

DIVISION OF VITAL STATISTICS

POPULATION OF CENSUS DIVISIONS OF ALBERTA CLASSIFIED BY
MUNICIPALITIES FOR CENSUS YEARS, 1961 AND 1966. (Concluded)

Subdivision	1966	1961	Subdivision	1966	1961
<u>Division No. 14</u>	20,358	19,282	Cities:		
78. I.D. (pt) (1)	3,550 (2)	3,484	Grande Prairie	11,417 (2)	8,352
79. I.D.	490	667	Towns:		
95. I.D.	3,202 (3)	3,638	Beaverlodge	1,083 (2)	897
96. I.D. (pt) (4)	410	430	Fairview	1,884 (2)	1,506
109. I.D.	1,457 (2,5)	2,351	Falher	843	741
Towns:			Grimshaw	1,376 (2)	1,095
Edson	3,788 (3)	3,198	High Level	708 (9)	-
Hinton	4,307	3,529	High Prairie	2,241	1,756
Whitecourt	2,279 (5)	1,054	Manning	1,179	896
Villages:			McLennan	1,104 (2)	1,078
Evansburg	472	452	Peace River	4,087 (4)	2,543
Wildwood	403	479	Slave Lake	1,716 (2)	468
<u>Division No. 15</u>	88,344	76,884	Spirit River	1,034 (2)	890
96. I.D. (pt) (1)	150 (1)	-	Swan Hills	1,414	643
110. I.D.	472 (1)	552	Valleyview	1,827 (2)	1,077
111. I.D.	365	353	Villages:		
123. I.D.	86	279	Berwyn	430 (2)	347
124. I.D.	2,732 (2)	3,108	Donnelly	249	289
125. I.D.	3,101	3,212	Girouxville	305	318
126. I.D.	2,726 (2)	2,579	Hines Creek	418	398
128. I.D.	1,100 (3)	769	Hythe	445 (2)	449
129. I.D.	712	577	Kinuso	376	323
130. Smoky River	3,984 (2)	4,094	Nampa	288 (5)	271
131. I.D.	2,163 (4,5)	2,403	Rycroft	539 (2)	500
132. I.D.	2,595 (6)	2,646	Sexsmith	491 (2)	531
133. Spirit River	1,243 (2)	1,318	Wanham	235	251
134. I.D.	2,792	2,505	Wembley	299	303
135. Peace	2,223 (2,4)	2,053			
136. Fairview	1,745 (2)	1,917			
137. I.D.	(3)	174			
138. I.D.	3,251 (4,7)	3,194			
139. I.D.	3,379	2,772			
144. I.D.	84 (8)	212			
145. I.D.	8 (8)	144			
146. I.D.	852 (7,8)	662			
147. I.D.	3,826 (8,9)	3,189			
148. I.D.	63 (8)	86			
149. I.D.	129 (8)	339			
Grande Prairie, County No. 1	8,697 (2,6)	8,803			
Indian Reserves	3,878	3,022			

ESTIMATED POPULATION BY SEX AND AGE GROUP
FOR ALBERTA, 1967

Ages	Total	Male	Female	Ages	Total	Male	Female
0 - 4	167.3	85.7	81.6	50-54	69.1	35.2	33.9
5 - 9	182.0	92.9	89.1	55-59	57.0	29.4	27.6
10-14	163.3	83.9	79.4	60-64	46.9	24.8	22.1
15-19	135.0	68.2	66.8	65-69	36.3	18.9	17.4
20-24	107.5	52.8	54.7	70-74	28.1	14.4	13.7
25-29	94.3	46.6	47.7	75-79	21.5	11.2	10.3
30-34	94.5	48.5	46.0	80-84	13.2	6.8	6.4
35-39	96.1	49.9	46.2	85-89	5.6	2.8	2.8
40-44	90.7	45.7	45.0	90+	1.7	0.8	0.9
45-49	79.9	40.3	39.6				
TOTAL					1,490.0	758.8	731.2

TABLE 1
GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS AND INCORPORATED
URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

	LIVE BIRTHS				STILLBIRTHS				INFANT DEATHS								Maternal Deaths							
	Total	In Hospital		Illegitimate		20-27 weeks		Marriages	Total Deaths		Deaths in Hosp.	Total		Under 7 Days		7-27 Days		Post Neonatal						
		Male	Fem.	Male	Fem.	M	F		M	F		Male	Fem.	M	F	M		F	M	F	M	F		
Alberta	30,691	15,682	15,009	15,549	14,913	1,813	1,705	35	29	153	133	12,903	5,895	3,628	6,839	329	286	217	161	19	15	93	110	5
Division No. 1	628	320	308	316	308	19	21	2	1	5	4	341	171	145	262	6	2	5	2	-	-	1	-	-
Bow Island, t.	14	6	8	6	8	-	1	-	-	-	-	16	8	4	9	-	-	-	-	-	-	-	-	-
Medicine Hat, c.	396	200	196	199	196	15	16	2	1	5	2	305	133	121	217	6	1	5	1	-	-	1	-	-
Redcliff, t.	34	17	17	17	17	1	1	-	-	-	-	15	6	4	6	-	1	-	1	-	-	-	-	-
Other	184	97	87	94	87	3	3	-	-	2	5	24	16	30	30	-	-	-	-	-	-	-	-	-
Division No. 2	1,541	766	775	755	768	53	69	1	3	4	4	681	348	207	407	20	12	12	8	1	1	7	3	-
Brooks, t.	83	44	39	44	39	2	3	-	-	-	-	64	15	13	21	3	2	2	1	-	-	1	1	-
Coaldale	36	20	16	20	16	2	1	-	-	1	-	30	12	8	19	-	-	-	-	-	-	-	-	-
Lethbridge, c.	627	329	298	329	298	32	34	-	2	1	4	422	201	123	239	10	6	6	5	1	1	3	-	-
Picture Butte, t.	6	3	3	3	3	1	-	-	-	-	-	2	1	1	1	1	-	1	-	-	-	-	-	-
Raymond, t.	27	13	14	13	14	3	-	-	-	-	-	20	12	3	12	-	-	-	-	-	-	-	-	-
Taber, t.	105	51	54	51	54	3	5	1	-	-	-	63	16	10	23	1	1	1	1	-	-	-	-	-
Other	657	306	351	295	344	10	26	-	1	2	-	80	91	49	92	5	3	2	1	-	-	3	2	-
Division No. 3	575	303	272	294	266	56	56	-	1	5	5	351	145	96	175	8	5	5	1	1	1	2	3	-
Cardston, t.	55	31	24	30	24	9	7	-	1	-	1	178	11	7	15	1	-	-	-	1	-	-	-	-
Clareholm, t.	35	21	14	21	14	2	2	-	-	-	-	28	12	13	20	-	1	-	1	-	-	-	-	-
Fort Macleod, t.	35	17	18	17	18	4	1	-	-	2	-	27	22	18	27	-	-	-	-	-	-	-	-	-
Magrath, t.	14	7	7	7	7	-	-	-	1	2	7	7	7	5	11	1	1	1	-	-	-	-	-	-
Pincher Creek, t.	59	29	30	29	30	5	2	-	-	-	-	38	20	13	25	-	-	-	-	-	-	-	-	-
Other	377	198	179	190	173	36	44	-	2	2	2	73	73	40	77	6	3	4	-	-	1	2	2	-
Division No. 4	275	121	154	116	151	5	13	-	-	-	-	119	76	34	80	2	4	2	3	-	-	-	1	-
Hanna, t.	45	24	21	24	21	2	2	-	-	-	-	60	25	7	26	1	-	1	-	-	-	-	-	-
Other	230	97	133	92	130	3	11	-	-	-	-	59	51	27	54	1	4	1	3	-	-	-	1	-
Division No. 5	650	302	348	301	348	29	39	2	-	6	2	216	195	96	201	6	5	4	3	-	-	2	2	2
Drumheller, c.	73	36	37	36	37	3	5	-	-	-	-	63	39	24	45	-	1	-	-	-	-	1	-	-
Three Hills, t.	34	17	17	17	17	1	1	-	1	-	-	19	8	5	10	-	-	-	-	-	-	-	-	-
Vulcan, t.	25	14	11	14	11	-	-	-	-	-	-	20	14	8	15	2	-	1	-	-	-	1	-	-
Other	518	235	283	234	283	25	33	2	-	5	2	114	134	59	131	4	4	3	3	-	-	1	1	2
Division No. 6	8,112	4,159	3,953	4,143	3,946	507	489	7	6	51	35	3,452	1,433	978	1,740	98	74	68	42	6	4	24	28	-
Calgary, c.	4,714	3,785	3,633	3,776	3,629	486	466	5	6	46	31	3,228	1,247	870	1,534	86	69	64	41	5	4	17	24	-
Didsbury, t.	37	20	17	20	17	3	2	-	-	-	-	34	12	8	17	2	-	1	-	-	-	1	-	-
High River, t.	36	26	10	26	10	1	-	-	1	-	-	36	20	16	26	-	-	-	-	-	-	-	-	-
Olds, t.	62	33	29	33	29	1	-	-	-	2	5	50	18	11	23	1	1	-	-	-	-	1	1	-
Other	559	295	264	288	261	16	21	-	-	4	2	104	136	73	140	9	4	3	1	1	-	5	3	-

TABLE 1
GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS AND INCORPORATED
URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

	LIVE BIRTHS						STILLBIRTHS						INFANT DEATHS										Maternal Deaths					
	In Hospital			Illegitimate			20-27 weeks			28+ weeks			Marriages		Total Deaths		Deaths in Hosp.		Total		Under 7 Days			7-27 Days		Post Neonatal		
	Male	Fem.	Fem.	Male	Fem.	Fem.	Male	Fem.	M	F	M	F	M	F	Male	Fem.	Hosp.	M	F	M	F	M		F	M	F	M	F
Division No. 7	686	357	329	349	325	17	17	-	-	6	3	312	192	123	242	7	13	3	6	-	2	4	5	-	-	-	-	
Castor, t.	14	6	8	6	8	1	1	-	-	-	-	19	8	10	12	-	-	-	-	-	-	-	-	-	-	-	-	
Provost, t.	19	10	9	10	9	1	1	-	-	-	-	27	3	4	6	-	2	-	2	-	-	-	-	-	-	-	-	
Stettler, t.	72	36	36	36	36	1	1	-	-	1	-	70	18	22	29	1	2	-	2	-	-	1	-	-	-	-	-	
Wainwright, t	82	39	43	39	43	3	2	-	1	-	-	42	28	23	43	1	3	1	-	-	-	1	2	-	-	-	-	
Other	499	266	233	258	229	11	12	-	4	3	154	135	64	152	5	6	2	2	-	1	3	3	-	-	-	-	-	
Division No. 8	1,531	777	754	773	752	109	99	1	2	5	6	648	340	209	381	18	16	9	10	1	-	8	6	-	-	-	-	
Innisfail, t.	53	29	24	29	24	1	1	-	-	-	1	37	9	15	18	1	1	-	1	-	-	1	-	-	-	-	-	
Lacombe, t.	62	30	32	30	32	-	1	-	1	1	43	13	11	14	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ponoka, t.	91	41	50	41	50	10	8	-	-	-	1	56	25	17	33	1	2	-	2	-	-	-	-	-	-	-	-	
Red Deer, c.	497	248	249	248	249	27	25	-	1	1	272	95	62	103	8	5	7	3	-	-	-	1	2	-	-	-	-	
Rimby, t.	35	16	19	16	19	3	4	-	-	-	-	49	7	5	8	-	-	-	-	-	-	-	-	-	-	-	-	
Rocky Mtn. House, t.	91	48	43	47	42	14	12	-	1	-	-	45	19	12	23	2	2	1	1	-	-	1	1	-	-	-	-	
Sylvan Lake, t.	24	10	14	10	14	2	3	-	-	-	-	16	8	11	14	-	-	-	-	-	-	-	-	-	-	-	-	
Other	678	355	323	352	322	52	45	-	2	2	2	130	164	76	168	6	6	1	3	1	-	4	3	-	-	-	-	
Division No. 9	306	150	156	148	155	22	33	-	-	2	3	153	89	59	111	5	7	4	4	-	-	1	3	-	-	-	-	
Bellevue, vl.	15	9	6	9	6	-	1	-	-	-	1	7	10	6	14	-	-	-	-	-	-	-	-	-	-	-	-	
Blairmore, t.	29	12	17	12	17	1	1	-	-	-	-	23	16	8	22	-	2	-	2	-	-	-	-	-	-	-	-	
Canmore, vl.	11	6	5	6	5	1	2	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Coleman, t.	33	18	15	18	15	1	3	-	1	-	-	16	19	18	27	2	2	2	2	-	-	-	-	-	-	-	-	
Other	218	105	113	103	112	19	26	-	1	2	101	44	27	48	3	3	2	-	-	-	-	1	3	-	-	-	-	
Division No. 10	1,094	549	545	548	543	28	25	1	4	5	520	411	244	440	12	9	7	8	-	1	5	-	-	-	-	-	-	
Camrose, c.	155	81	74	81	74	7	6	-	-	2	111	106	79	92	5	1	3	1	-	-	2	-	-	-	-	-	-	
Lloydminster, c.(pt)	87	45	42	45	42	3	2	-	-	-	-	84	20	16	32	-	-	-	-	-	-	-	-	-	-	-	-	
Two Hills, t.	13	3	10	3	10	-	-	-	-	-	-	6	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	
Vegreville, t.	59	25	34	25	34	2	3	-	1	-	65	30	13	29	1	-	1	-	-	-	-	-	-	-	-	-	-	
Vermilion, t.	49	27	22	27	22	3	1	-	-	-	1	28	16	11	23	-	-	-	-	-	-	-	-	-	-	-	-	
Viking, t.	17	7	10	7	10	-	1	-	-	-	-	22	8	11	7	-	-	-	-	-	-	-	-	-	-	-	-	
Other	714	361	353	360	351	13	12	1	3	2	204	228	113	253	6	8	3	7	-	1	3	-	-	-	-	-	-	
Division No. 11	10,469	5,403	5,066	5,387	5,055	649	560	18	12	43	42	4,698	1,639	1,003	1,924	80	71	57	46	2	4	21	21	2	-	-	-	
Devon, t.	13	6	7	6	7	2	-	-	1	-	-	9	3	2	4	-	-	-	-	-	-	-	-	-	-	-	-	
Drayton Valley, t.	104	59	45	59	45	4	2	-	-	-	-	42	9	4	10	-	2	1	2	-	-	-	-	-	-	-	-	
Edmonton, t.	8,726	4,489	4,237	4,483	4,236	569	501	15	11	33	34	4,147	1,293	829	1,593	66	61	46	38	2	4	18	19	2	-	-	-	
Fort Saskatchewan, t.	76	46	30	45	30	4	1	-	-	-	-	29	17	6	15	1	1	1	1	-	-	-	-	-	-	-	-	
Leduc, t.	43	22	21	22	21	1	1	-	2	2	40	23	10	17	-	-	-	-	-	-	-	-	-	-	-	-	-	
St. Albert, t.	220	121	99	121	99	9	6	1	-	-	45	26	22	17	1	-	1	-	-	-	-	-	-	-	-	-	-	
Stony Plain, t.	29	14	15	14	15	1	1	-	-	-	-	34	11	10	16	1	-	1	-	-	-	-	-	-	-	-	-	
Wetaskiwin, c.	117	60	57	60	57	6	8	-	2	-	-	86	28	18	37	-	-	-	-	-	-	-	-	-	-	-	-	
Other	1,141	586	555	577	545	53	40	2	-	4	6	266	229	102	215	10	7	7	5	-	-	3	2	-	-	-	-	

TABLE 1
GENERAL SUMMARY OF VITAL STATISTICS FOR CENSUS DIVISIONS AND INCORPORATED
URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

	LIVE BIRTHS						STILLBIRTHS						INFANT DEATHS						Maternal Deaths																
	In Hospital			Illegitimate			20-27 weeks			28+ weeks			Marriages			Total Deaths				Deaths in Hosp.			Total			Under 7 Days			7-27 Days			Post Neonatal			
	Male	Fem.	Fem.	Male	Fem.	Fem.	Male	Fem.	M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Total	Male	Fem.	650	664	643	73	78	1	-	3	8	346	214	125	230	18	22	10	10	3	1	5	11	1	1	1	1	1	1	1	1	1	1	1	
Division No. 12																																			
Bonnyville, t.	64	34	30	34	30	3	4	-	-	-	-	30	22	11	22	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cold Lake, t.	44	24	20	24	20	2	2	-	-	1	1	13	3	3	5	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fort McMurray, t.	138	61	77	61	77	9	5	-	-	-	-	24	9	4	12	3	4	2	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grand Centre, t.	61	34	27	34	27	3	3	-	-	-	-	23	7	2	7	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lac La Biche, t.	58	27	31	27	31	7	5	-	-	-	-	21	10	9	14	1	3	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
St. Paul, t.	99	58	41	58	41	3	4	-	-	-	-	63	19	17	25	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other	856	432	424	426	417	49	55	1	-	2	7	172	144	79	145	12	10	6	5	1	-	5	5	1	-	-	-	-	-	-	-	-	-	-	
Division No. 13																																			
Athabasca, t.	33	14	19	14	19	3	3	-	-	-	1	33	3	4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Barhead, t.	52	33	19	33	19	3	1	-	-	-	-	55	20	11	23	3	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Redwater, t.	16	8	8	8	7	-	2	-	-	-	-	2	4	4	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Westlock, t.	63	29	34	29	34	1	6	-	-	-	1	68	6	6	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other	626	312	314	308	309	26	23	1	-	4	3	148	184	86	183	13	8	7	6	1	-	5	2	-	-	-	-	-	-	-	-	-	-	-	
Division No. 14																																			
Edson, t.	111	51	60	51	60	4	5	-	-	1	-	46	25	8	29	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hinton, t.	129	69	60	69	59	3	3	-	-	-	-	23	15	8	11	5	-	3	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Whitecourt, t.	55	30	25	30	25	3	1	1	-	1	-	8	6	1	5	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other	191	99	92	94	86	10	7	-	-	1	-	24	46	13	34	4	4	4	2	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	
Division No. 15																																			
Beaverlodge, t.	12	11	1	11	1	3	-	-	-	1	1	15	6	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fairview, t.	47	22	25	22	25	3	2	-	-	-	-	37	8	3	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grande Prairie, c.	281	141	140	141	140	12	10	-	2	-	1	134	65	26	73	3	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Grimshaw, t.	55	24	31	24	31	2	2	-	1	-	-	12	5	3	5	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
High Prairie, t.	69	33	36	33	36	14	7	-	-	2	-	34	12	9	18	2	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Manning, t.	15	9	6	8	6	1	3	-	-	-	-	5	3	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
McLennan, t.	19	10	9	10	9	3	5	-	1	-	-	14	5	3	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Peace River, t.	153	75	78	74	78	8	9	-	-	1	-	68	16	6	16	-	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Slave Lake, t.	30	18	12	16	12	3	3	-	-	-	-	4	3	1	4	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Spirit River, t.	13	6	7	6	7	-	-	-	-	-	-	12	3	1	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Swan Hills, t.	8	3	5	3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Valleyview, t.	44	22	22	22	22	3	2	-	-	-	-	22	7	1	6	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Other	1,482	786	696	749	663	141	115	-	-	7	8	302	203	112	195	15	29	7	7	3	1	5	21	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 3

DEATHS AND HOSPITAL DEATHS BY OCCURENCE AND RESIDENCE FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

		.....TOTAL DEATHS.....				.....HOSPITAL DEATHS.....			
		TOTAL BY OCCUR.	TOTAL BY RESID.	OCCUR. BY RESID.	RESID. BY OCCUR.	TOTAL BY OCCUR.	TOTAL BY RESID.	OCCUR. BY RESID.	RESID. BY OCCUR.
01	DIVISION 1								
007	BOW ISLAND	9	12	5	8	5	9	2	6
040	MEDICINE HAT	290	254	52	16	250	217	44	11
047	REDCLIFF	3	10	1	8		6		6
	TOTAL	311	316	25	30	255	262	16	23
02	DIVISION 2								
009	BROOKS	43	28	19	4	33	21	16	4
014	COALDALE	17	20	3	6	16	19	3	6
035	LETHBRIDGE	364	324	78	38	291	239	76	24
081	PICTURE BUTTE	2	2	1	1	1	1	1	1
046	RAYMOND	18	15	7	4	16	12	7	3
056	TABER	33	26	17	10	30	23	16	9
	TOTAL	558	555	65	62	417	407	52	42
03	DIVISION 3								
012	CARDSTON	23	18	8	3	19	15	6	2
013	CLARESHOLM	46	25	28	7	43	20	28	5
025	FORT MACLEOD	48	40	15	7	33	27	11	5
037	MAGRATH	8	12	3	7	7	11	3	7
044	PINCHER CREEK	53	33	28	8	47	25	25	3
	TOTAL	227	241	35	49	164	175	28	39
04	DIVISION 4								
028	HANNA	33	32	14	13	27	26	13	12
	TOTAL	77	110	11	44	45	80	6	41
05	DIVISION 5								
020	DRUMHELLER	108	63	54	9	86	45	49	8
057	THREE HILLS	11	13	4	6	9	10	4	5
060	VULCAN	24	22	7	5	16	15	5	4
	TOTAL	225	291	23	89	133	201	10	78
06	DIVISION 6								
010	CALGARY	2,285	2,117	304	136	1,696	1,534	245	83
018	DIDSBURY	52	20	35	3	46	17	32	3
030	HIGH RIVER	54	36	25	7	40	26	20	6
042	OLDS	30	29	16	15	27	23	16	12
	TOTAL	2,507	2,411	241	145	1,834	1,740	186	92
07	DIVISION 7								
065	CASTOR	21	18	8	5	17	12	7	2
076	PROVOST	20	7	13		19	6	13	
053	STETTLER	54	40	24	10	48	29	23	4
061	WAINWRIGHT	62	51	19	8	55	43	17	5
	TOTAL	271	315	28	72	207	242	24	59
08	DIVISION 8								
031	INNISFAIL	33	24	20	11	25	18	16	9
033	LACOMBE	21	24	9	12	12	14	5	7
045	PONOKA	119	42	83	6	107	33	80	6
048	RED DEER	227	157	84	14	157	103	66	12
072	RIMBEY	24	12	17	5	20	8	15	3
050	ROCKY MOUNTAIN HOUSE	36	31	16	11	26	23	13	10
055	SYLVAN LAKE	5	19	2	16		14		14
	TOTAL	560	549	112	101	384	381	89	86
09	DIVISION 9								
075	BELLEVUE	1	16		15		14		14
005	BLAIRMORE	1	24		23		22		22
079	CANMORE	1		1		1		1	
016	COLEMAN	7	37	1	31		27		27
	TOTAL	135	148	40	53	86	111	17	42
10	DIVISION 10								
011	CAMROSE	223	185	47	9	132	92	45	5
036	LLOYDMINSTER	21	36	6	21	17	32	6	21
085	TWO HILLS	4	4	2	2	4	4	2	2
058	VEGREVILLE	64	43	35	14	54	29	34	9
059	VERMILION	22	27	5	10	21	23	5	7
074	VIKING	39	19	21	1	23	7	17	1
	TOTAL	569	655	55	141	357	440	41	124

DIVISION OF VITAL STATISTICS

TABLE 3

DEATHS AND HOSPITAL DEATHS BY OCCURENCE AND RESIDENCE FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

		.....TOTAL DEATHS.....				.....HOSPITAL DEATHS.....			
		TOTAL	TOTAL	OCCUR.	RESID.	TOTAL	TOTAL	OCCUR.	RESID.
		BY	BY	BY	BY	BY	BY	BY	BY
		OCCUR.	RESID.	OCCUR.	RESID.	OCCUR.	RESID.	OCCUR.	RESID.
11	DIVISION 11								
017	DEVON	3	5	1	3	2	4		2
019	DRAYTON VALLEY	22	13	13	4	19	10	13	4
021	EDMONTON	2,603	2,122	678	197	2,092	1,593	614	115
026	FORT SASKATCHEWAN	31	23	13	5	23	15	11	3
034	LEDUC	51	33	28	10	33	17	23	7
051	ST. ALBERT	33	48	3	18		17		17
054	STONY PLAIN	20	21	9	10	14	16	8	10
063	WETASKIWIN	83	46	46	9	69	37	38	6
	TOTAL	3,043	2,642	556	155	2,347	1,924	504	81
12	DIVISION 12								
006	BONNYVILLE	41	33	16	8	31	22	15	6
015	COLD LAKE	16	6	13	3	15	5	13	3
039	FORT MCMURRAY	22	13	14	5	16	12	9	5
066	GRAND CENTRE	1	9		8		7		7
069	LAC LA BICHE	28	19	12	3	23	14	11	2
052	ST. PAUL	45	36	17	8	35	25	14	4
	TOTAL	276	339	23	86	167	230	12	75
13	DIVISION 13								
001	ATHABASCA	30	7	25	2	23	5	20	2
002	BARRHEAD	57	31	28	2	49	23	26	
049	REDWATER	3	8	3	8		8		8
062	WESTLOCK	54	12	43	1	51	9	42	
	TOTAL	247	328	24	105	151	228	15	92
14	DIVISION 14								
022	EDSON	20	33	7	20	16	29	5	18
068	HINTON	16	23	8	15	11	11	7	7
077	WHITECOURT	10	7	7	4	8	5	5	2
	TOTAL	85	122	22	59	35	79	9	53
15	DIVISION 15								
078	BEAVERLODGE	8	8	5	5	6	5	4	3
023	FAIRVIEW	24	11	16	3	20	8	15	3
027	GRANDE PRAIRIE	117	91	44	18	105	73	40	8
067	GRIMSHAW		8		8		5		5
029	HIGH PRAIRIE	37	21	21	5	32	18	19	5
080	MANNING	5	4	3	2	5	3	3	1
038	MCLENNAN	19	8	12	1	18	6	12	
043	PEACE RIVER	41	22	26	7	33	16	20	3
082	SLAVE LAKE	2	1	1					
083	SPIRIT RIVER	8	4	7	3	6	4	5	3
073	VALLEYVIEW	8	8	5	5	4	6	1	3
	TOTAL	448	501	30	83	283	339	10	66
	PROVINCE TOTAL	9,539	9,523	231	215	6,865	6,839	143	117

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

[illegible]

DIVISION OF VITAL STATISTICS

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		Total Alta.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
A 20	SEPTICAEMIA AND PYAEMIA ...	M	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1
		F	2	-	-	1	-	-	1	-	-	-	-	-	-	-	-	1
		T	4	-	-	1	-	-	2	-	-	-	-	-	-	-	-	2
A 21	DIPHTHERIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 22	WHOOPING COUGH	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	3	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
		T	3	-	-	1	-	-	-	-	-	-	1	-	-	-	1	-
A 23	MENINGOCOCCAL INFECTIONS ..	M	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	1
A 24	PLAGUE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 25	LEPROSY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 26	TETANUS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 27	ANTHRAX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	ACUTE POLIOMYELITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 29	ACUTE ENCEPHALITIS	M	4	-	-	-	-	-	1	-	-	-	-	1	-	-	-	2
		F	2	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-
		T	6	-	-	-	-	-	2	-	-	-	1	1	-	-	-	2
A 30	LATE EFFECTS OF POLIO- MYELITIS AND ENCEPHALITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 31	SMALLPOX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 32	MEASLES	M	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
		F	5	-	-	2	-	1	1	-	1	-	-	-	-	-	-	-
		T	6	-	-	2	-	1	2	-	1	-	-	-	-	-	-	-
A 33	YELLOW FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 34	INFECTIOUS HEPATITIS	M	2	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-
		F	2	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
		T	4	-	-	-	-	-	-	-	-	-	1	3	-	-	-	-
A 35	RABIES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 36	TYPHUS AND OTHER RICKETT- SIAL DISEASES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 37	MALARIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 38	SCHISTOSOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 39	HYDATID DISEASE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	FILARIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	ANKYLOSTOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	OTHER DISEASES DUE TO HELMINTHS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	OTHER	M	2	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-
		F	5	1	-	1	-	-	1	-	-	-	1	1	-	-	-	-
		T	7	1	1	1	-	-	1	-	-	-	1	2	-	-	-	-
TOTAL (A1-A43)			M 42	1	2	1	-	1	11	1	3	-	1	13	1	4	-	3
			F 29	2	-	6	-	1	4	-	1	-	5	5	1	-	1	3
			T 71	3	2	7	-	2	15	1	4	-	6	18	2	4	1	6

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST NO.	A	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TO	Total Alta.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
					Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.	Census Div.
II. NEOPLASMS.																			
MALIGNANT NEOPLASMS (A44-A59).																			
A 44		BUCCAL CAVITY AND PHARYNX	M	21	-	-	-	2	1	5	1	-	-	-	11	-	-	-	1
			F	7	1	1	-	-	-	1	-	1	-	-	3	-	-	-	-
			T	28	1	1	-	2	1	6	1	1	-	-	14	-	-	-	1
A 45		ESOPHAGUS	M	22	-	-	-	2	2	4	1	2	-	1	8	-	-	1	1
			F	8	-	-	-	-	-	2	-	2	-	1	3	-	-	-	-
			T	30	-	-	-	2	2	6	1	4	-	2	11	-	-	1	1
A 46		STOMACH	M	115	3	9	1	1	5	17	1	3	-	14	38	4	12	2	5
			F	55	3	1	1	-	5	13	2	1	2	4	11	2	6	-	4
			T	170	6	10	2	1	10	30	3	4	2	18	49	6	18	2	9
A 47		INTESTINE, EXCEPT RECTUM ..	M	94	4	5	3	2	5	18	1	6	1	11	27	1	5	1	4
			F	96	5	6	3	2	1	28	2	3	1	6	32	-	1	1	5
			T	190	9	11	6	4	6	46	3	9	2	17	59	1	6	2	9
A 48		RECTUM	M	51	3	5	1	1	1	11	3	1	-	4	17	-	2	1	1
			F	31	3	3	1	-	1	6	-	2	-	1	12	-	1	-	1
			T	82	6	8	2	1	2	17	3	3	-	5	29	-	3	1	2
A 49		LARYNX	M	15	1	-	2	-	-	3	-	3	-	1	2	1	2	-	-
			F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			T	15	1	-	2	-	-	3	-	3	-	1	2	1	2	-	-
A 50		TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY	M	209	7	8	2	2	5	56	13	8	6	10	66	11	4	4	7
			F	42	4	5	-	-	2	7	1	2	-	6	10	2	1	-	2
			T	251	11	13	2	2	7	63	14	10	6	16	76	13	5	4	9
A 51		BREAST	M	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
			F	155	5	5	1	4	7	44	7	6	6	4	42	8	9	1	6
			T	156	5	5	1	4	7	44	7	6	6	4	42	9	9	1	6
A 52		CERVIX UTERI	F	31	-	1	1	1	-	16	-	2	-	-	8	-	1	-	1
A 53		UTERUS, OTHER PARTS	F	18	1	-	-	-	1	4	-	-	-	2	5	-	2	1	2
A 54		PROSTATE	M	99	5	7	4	2	2	26	1	8	1	6	26	1	-	2	8
A 55		SKIN	M	14	-	-	1	-	1	1	-	1	-	2	6	-	-	-	2
			F	6	-	-	-	-	-	3	-	1	-	1	1	-	-	-	-
			T	20	-	-	1	-	1	4	-	2	-	3	7	-	-	-	2
A 56		BONE AND CONNECTIVE TISSUE	M	10	-	1	-	1	-	4	-	1	-	-	2	-	-	-	1
			F	10	-	-	-	-	-	5	-	1	-	1	3	-	-	-	-
			T	20	-	1	-	1	-	9	-	2	-	1	5	-	-	-	1
A 57 OTHER AND UNSPECIFIED SITES.																			
A		DIGESTIVE ORGANS	M	96	4	3	-	3	2	20	2	11	3	7	25	6	2	2	6
		(155-159)	F	70	8	5	-	1	2	16	-	5	3	4	21	4	1	-	-
			T	166	12	8	-	4	4	36	2	16	6	11	46	10	3	2	6
B		RESPIRATORY ORGANS	M	3	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-
		(160, 164, 165)	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			T	3	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-
C		URINARY ORGANS	M	68	2	-	1	-	-	12	2	2	1	6	26	6	5	1	4
		(180, 181)	F	27	2	1	-	-	1	9	1	3	1	-	8	-	1	-	-
			T	95	4	1	1	-	1	21	3	5	2	6	34	6	6	1	4
D		BRAIN AND NERVOUS SYSTEM (193)	M	33	-	1	-	-	1	7	-	2	-	4	12	1	3	-	2
			F	19	1	1	-	-	-	5	-	-	1	1	10	-	-	-	-
			T	52	1	2	-	-	1	12	-	2	1	5	22	1	3	-	2
E		OTHER	M	36	-	-	-	-	2	1	-	3	-	4	14	-	1	-	4
			F	97	5	4	-	1	1	28	-	9	1	6	33	3	4	1	1
			T	133	5	4	-	1	3	36	-	12	1	10	47	3	5	1	5
TOTAL (A57).																			
			M	236	6	4	1	3	5	47	4	18	4	22	79	13	11	3	16
			F	213	16	11	-	2	4	58	1	17	6	11	72	7	6	1	1
			T	449	22	15	1	5	9	105	5	35	10	33	151	20	17	4	17
A 58		LEUKAEMIA AND ALEUKAEMIA ..	M	56	3	5	3	-	1	15	1	2	1	5	11	3	1	-	5
			F	31	3	3	1	-	-	13	-	2	2	-	4	1	-	-	2
			T	87	6	8	4	-	1	28	1	4	3	5	15	4	1	-	7
A 59 LYMPHATIC AND HAEMATOPOIETIC SYSTEM.																			
A		HODGKIN'S (201)	M	19	-	2	1	-	-	6	1	2	-	-	5	-	2	-	-
			F	7	-	-	-	-	-	-	-	2	-	1	2	-	1	1	-
			T	26	-	2	1	-	-	6	1	4	-	1	7	-	3	1	-
B		OTHER	M	44	1	5	-	1	1	16	1	1	-	2	11	-	3	-	2
			F	23	1	2	-	-	1	7	1	1	-	1	6	-	1	-	2
			T	67	2	7	-	1	2	23	2	2	-	3	17	-	4	-	4
TOTAL (A59).																			
			M	63	1	7	1	1	1	22	2	3	-	2	16	-	5	-	2
			F	30	1	2	-	-	1	7	1	3	-	2	8	-	2	1	2
			T	93	2	9	1	1	2	29	3	6	-	4	24	-	7	1	4
TOTAL (A44-A59).																			
			M	1006	33	51	19	17	29	229	28	56	13	78	309	35	42	14	53
			F	733	42	38	8	9	22	207	14	43	17	39	214	20	29	5	26
			T	1739	75	89	27	26	51	436	42	99	30	117	523	55	71	19	79

DIVISION OF VITAL STATISTICS

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	Total Alta.	1 Census Div.	2 Census Div.	3 Census Div.	4 Census Div.	5 Census Div.	6 Census Div.	7 Census Div.	8 Census Div.	9 Census Div.	10 Census Div.	11 Census Div.	12 Census Div.	13 Census Div.	14 Census Div.	15 Census Div.
A 60	BENIGN AND UNSPECIFIED	M 9 F 9 T 18	- - -	- 1 1	- - -	- - -	2 - 2	- 4 4	- - -	1 1 2	- - -	2 3 5	2 3 5	1 - 1	- - -	- - -	1 - 1
	TOTAL (A44-A60)	M 1015 F 742 T 1757	33 42 75	51 39 90	19 8 27	17 9 26	31 22 53	229 211 440	28 14 42	57 44 101	13 17 30	80 39 119	311 217 528	36 20 56	42 29 71	14 5 19	54 26 80
III, IV. ALLERGIC, ENDOCRINE, METABOLIC AND BLOOD DISEASES.																	
A 61	NON-TOXIC GOITRE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 62	THYROTOXICOSIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 63	DIABETES MELLITUS	M 90 F 89 T 179	- 2 2	6 6 12	2 2 4	1 - 1	6 2 8	30 23 53	4 4 8	6 6 12	3 1 4	7 5 12	19 29 48	2 4 6	1 3 4	1 - 1	2 2 4
A 64	NUTRITIONAL DEFICIENCY STATES	M 3 F - T 3	- - -	- - -	- - -	- - -	1 - 1	- - -	- - -	- - -	- - -	- - -	1 - 1	- - -	- - -	- - -	1 - 1
A 65	ANAEMIAS	M 11 F 6 T 17	- - -	- 1 1	- - -	- - -	- - -	3 - 3	- - -	- - -	- 1 1	1 1 2	3 2 5	1 - 1	1 - 1	1 - 1	1 1 2
A 66	OTHER	M 37 F 25 T 62	1 - 1	3 2 5	- - -	- - -	- - -	7 11 18	1 1 2	3 - 3	1 2 3	7 1 8	8 6 14	2 2 4	1 - 2	- - -	3 - 3
	TOTAL (A61-A66)	M 141 F 120 T 261	1 2 3	9 9 18	2 2 4	1 - 1	7 2 9	40 34 74	5 5 10	9 6 15	4 3 7	15 7 22	31 37 68	5 6 11	3 4 7	2 - 2	7 3 10
V. MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.																	
A 67	PSYCHOSES	M 4 F 3 T 7	- - -	- 1 1	- - -	- - -	- - -	1 - 1	- - -	- - -	- - -	- - -	1 2 3	- - -	1 - 1	- - -	1 - 1
A 68	PSYCHONEUROTIC AND PERSONALITY DISORDERS	M 20 F 3 T 23	- - -	- - 1	1 - 1	- - -	1 2 3	5 1 6	2 - 2	- - -	- - -	1 - 1	9 - 9	1 - 1	- - -	- - -	- - -
A 69	MENTAL DEFICIENCY	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	TOTAL (A67-A69)	M 24 F 6 T 30	- 1 -	- 1 1	1 - 1	- - -	1 2 3	6 1 7	2 - 2	- - -	- - -	1 - 1	10 2 12	1 - 1	1 - 1	- - -	1 - 1
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																	
A 70	CEREBROVASCULAR LESIONS	M 549 F 470 T 1019	25 21 46	29 29 58	15 14 29	6 9	20 16 36	147 136 283	20 17 37	54 34 88	9 7 16	31 37 68	130 114 244	17 14 31	13 11 24	5 - 5	28 17 45
A 71	NON-MENINGOCOCCAL MENINGITIS	M 3 F 3 T 6	- - -	- - -	- - -	- - -	- - -	1 - 1	- 2 2	- - -	- - -	- - -	2 1 3	- - -	- - -	- - -	- - -
A 72	MULTIPLE SCLEROSIS	M 4 F 10 T 14	- - -	- 2 2	- - -	- - -	- - -	2 2 4	1 - 1	- - -	- - -	- - -	1 4 5	- - -	- 1 1	- - -	- 1 1
A 73	EPILEPSY	M 11 F 8 T 19	- - -	1 - 1	- - -	- - -	- 1 1	6 1 7	- - -	- 2 2	- - -	- - -	3 3 6	- - -	- - -	1 - 1	- 1 1
A 74	INFLAMMATORY DISEASES OF THE EYE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 75	CATARACT	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 76	GLAUCOMA	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 77	OTITIS MEDIA AND MASTOIDITIS	M 3 F 1 T 4	- - -	1 - 1	- - -	- - -	- - -	2 - 2	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -
A 78	OTHER	M 30 F 33 T 63	- 2 2	2 1 3	- 3 3	- - -	1 3 1	7 11 18	2 2 4	2 1 3	- - -	1 2 3	11 7 18	2 2 4	1 1 2	- - -	1 1 2
	TOTAL (A70-A78)	M 600 F 525 T 1125	25 23 48	33 32 65	15 17 32	6 9	21 17 38	165 150 315	23 21 44	56 37 93	9 7 16	32 39 71	147 130 277	19 16 35	14 13 27	6 - 6	29 20 49

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	Total Alta.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
VII. DISEASES OF THE CIRCULATORY SYSTEM.																	
HEART DISEASE (A79-A83).																	
A 79 RHEUMATIC FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 80 CHRONIC RHEUMATIC	M	26	-	1	-	1	1	7	-	2	-	1	10	-	1	2	-
	F	54	1	3	1	-	1	18	4	2	1	3	17	-	1	-	2
	T	80	1	4	1	1	2	25	4	4	1	4	27	-	2	2	2
A 81 ARTERIOSCLEROTIC AND DEGENERATIVE	M	1792	62	130	45	31	66	329	61	114	15	137	566	66	58	19	93
	F	871	45	55	24	14	25	193	31	49	10	78	243	36	28	8	32
	T	2663	107	185	69	45	91	522	92	163	25	215	809	102	86	27	125
A 82 OTHER	M	92	-	7	3	1	-	26	4	4	2	9	23	1	10	-	2
	F	72	-	7	3	-	-	18	5	5	-	4	21	2	3	2	2
	T	164	-	14	6	1	-	44	9	9	2	13	44	3	13	2	4
A 83 HYPERTENSIVE	M	33	-	1	-	-	1	7	-	2	2	4	13	-	1	1	1
	F	37	-	3	1	-	-	11	2	1	2	1	17	-	1	-	1
	T	70	-	4	1	-	1	15	2	3	4	5	30	-	2	1	2
TOTAL (A79-A83)	M	1943	62	139	48	33	68	369	65	122	19	151	612	67	70	22	96
	F	1034	46	68	29	14	26	237	42	57	13	86	298	38	33	10	37
	T	2977	108	207	77	47	94	606	107	179	32	237	910	105	103	32	133
A 84 HYPERTENSION	M	26	2	1	1	-	-	8	1	-	1	1	7	1	1	1	1
	F	20	-	1	-	-	-	8	-	2	1	1	3	2	2	-	-
	T	46	2	2	1	-	-	16	1	2	2	2	10	3	3	1	1
A 85 ARTERIAL DISEASES	M	149	2	12	5	1	6	50	7	6	3	10	32	1	3	3	8
	F	112	5	5	4	-	5	29	7	2	-	6	32	1	4	3	9
	T	261	7	17	9	1	11	79	14	8	3	16	64	2	7	6	17
A 86 OTHER	M	40	3	1	-	-	1	6	1	2	-	2	14	2	3	-	5
	F	26	1	1	1	1	-	5	2	1	1	1	10	-	1	-	1
	T	66	4	2	1	1	1	11	3	3	1	3	24	2	4	-	6
TOTAL (A79-A86)	M	2158	69	153	54	34	75	433	74	130	23	164	665	71	77	26	110
	F	1192	52	75	34	15	31	279	51	62	15	94	343	41	40	13	47
	T	3350	121	228	88	49	106	712	125	192	38	258	1008	112	117	39	157
VIII. DISEASES OF THE RESPIRATORY SYSTEM.																	
A 87 ACUTE UPPER RESPIRATORY ...	M	6	-	-	-	-	-	1	-	-	-	-	4	-	1	-	-
	F	3	-	-	1	-	-	1	-	-	-	-	1	-	-	-	-
	T	9	-	-	1	-	-	2	-	-	-	-	5	-	1	-	-
A 88 INFLUENZA	M	8	1	-	-	-	1	1	1	-	-	4	-	-	-	-	-
	F	4	-	-	2	-	-	2	-	-	-	-	-	-	-	-	-
	T	12	1	-	2	-	1	3	1	-	-	4	-	-	-	-	-
PNEUMONIA (A89-A91).																	
A 89 LOBAR	M	15	-	1	1	-	1	3	1	-	1	-	6	-	-	-	1
	F	12	-	-	1	-	1	4	-	-	-	1	2	-	-	-	3
	T	27	-	1	2	-	2	7	1	-	1	1	8	-	-	-	4
A 90 BRONCHO	M	96	3	5	3	-	4	16	4	4	-	18	21	6	4	-	8
	F	75	2	1	2	1	-	16	1	3	3	8	27	1	2	1	7
	T	171	5	6	5	1	4	32	5	7	3	26	48	7	6	1	15
A 91 ATYPICAL, OTHER, UNSPECIFIED	M	59	1	3	-	-	1	17	-	7	1	5	20	2	1	1	-
	F	42	-	6	4	-	1	9	1	4	1	-	9	3	1	1	2
	T	101	1	9	4	-	2	26	1	11	2	5	29	5	2	2	2
TOTAL (A89-A91)	M	170	4	9	4	-	6	36	5	11	2	23	47	8	5	1	9
	F	129	2	7	7	1	2	29	2	7	4	9	38	4	3	2	12
	T	299	6	16	11	1	8	65	7	18	6	32	85	12	8	3	21
BRONCHITIS (A92, A93).																	
A 92 ACUTE	M	2	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-
	F	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	T	3	-	-	1	-	-	-	-	-	-	-	2	-	-	-	-
A 93 CHRONIC AND UNQUALIFIED ...	M	61	-	2	3	1	1	17	2	-	2	2	20	2	2	2	5
	F	13	-	-	1	-	2	3	2	1	-	-	3	-	1	-	-
	T	74	-	2	4	1	3	20	4	1	2	2	23	2	3	2	5
TOTAL (A92, A93)	M	63	-	2	4	1	1	17	2	-	2	2	21	2	2	2	5
	F	14	-	-	1	-	2	3	2	1	-	-	4	-	1	-	-
	T	77	-	2	5	1	3	20	4	1	2	2	25	2	3	2	5
A 94 TONSILS AND ADENOIDS	M	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-
	F	2	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
	T	4	-	-	-	-	2	-	-	-	-	-	1	1	-	-	-
A 95 EMPYEMA AND LUNG ABSCESS ..	M	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
A 96 PLEURISY	M	2	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-
	F	3	-	-	-	-	-	1	-	-	1	1	-	-	-	-	-
	T	5	-	-	1	-	-	1	1	-	1	1	-	-	-	-	-

DIVISION OF VITAL STATISTICS

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		Total Alla.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
A 97	OTHER	M	103	3	8	3	3	3	24	3	2	3	6	34	2	5	1	3
		F	37	1	-	-	-	1	12	1	3	2	-	13	-	2	1	-
		T	140	4	8	3	3	4	36	4	5	5	6	47	3	7	2	3
	TOTAL (A87-A97).....	M	356	8	19	12	4	13	81	12	13	7	35	106	12	13	4	17
		F	192	3	7	11	1	5	48	5	11	7	11	57	5	6	3	12
		T	548	11	26	23	5	18	129	17	24	14	46	163	17	19	7	29
IX. DISEASES OF THE DIGESTIVE SYSTEM.																		
A 98	DISEASES OF THE TEETH	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 99	ULCER OF THE STOMACH	M	15	-	1	1	-	2	3	-	1	1	1	3	-	2	-	-
		F	9	1	-	-	-	2	3	2	-	-	-	-	-	1	-	-
		T	24	1	1	1	-	4	6	2	1	1	1	3	-	3	-	-
A 100	ULCER OF THE DUODENUM	M	21	-	3	1	1	2	3	1	-	2	-	6	1	1	-	-
		F	11	-	1	-	-	-	2	2	2	-	-	4	-	-	-	-
		T	32	-	4	1	1	2	5	3	2	2	-	10	1	1	-	-
A 101	GASTRITIS AND DUODENITIS ..	M	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
A 102	APPENDICITIS	M	7	-	-	-	-	-	3	-	1	-	-	1	-	-	-	2
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	7	-	-	-	-	-	3	-	1	-	-	1	-	-	-	2
A 103	INTESTINAL OBSTRUCTION AND HERNIA	M	36	-	4	2	1	-	14	2	2	2	1	4	1	2	-	1
		F	23	2	2	1	-	-	3	1	4	1	1	4	2	1	1	-
		T	59	2	6	3	1	-	17	3	6	3	2	8	3	3	1	1
A 104	GASTRO-ENTERITIS AND COLITIS	M	20	-	1	1	-	1	3	2	1	1	1	3	2	2	-	2
		F	36	3	2	2	1	-	8	-	1	-	5	7	4	-	-	3
		T	56	3	3	3	1	1	11	2	2	1	6	10	6	2	-	5
A 105	CIRRHOSIS OF LIVER	M	48	1	3	1	-	1	20	-	-	-	8	11	-	-	1	2
		F	29	-	-	-	-	-	8	1	2	-	1	14	1	-	-	2
		T	77	1	3	1	-	1	28	1	2	-	9	25	1	-	1	4
A 106	CHOLELITHIASIS AND CHOLECY- STITIS	M	17	-	-	1	-	1	4	2	1	-	1	4	1	1	-	1
		F	27	1	3	1	-	-	2	1	4	-	2	7	2	1	1	2
		T	44	1	3	2	-	1	6	3	5	-	3	11	3	2	1	3
A 107	OTHER	M	43															

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	Total Alta.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
A 119 ARCTIC WITH SEPSIS	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 120 OTHER	F	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
TOTAL (A115-A120)	F	5	-	-	-	-	2	-	-	-	-	-	2	1	-	-	-
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM.																	
A 121 SKIN INFECTIONS	M	2	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-
	F	3	-	-	-	-	-	1	-	-	-	2	-	-	-	-	-
	T	5	-	-	-	-	-	2	-	-	-	2	1	-	-	-	-
A 122 ARTHRITIS AND SPONDYLITIS	M	10	-	2	1	-	-	3	-	1	-	-	3	-	-	-	-
	F	8	-	1	1	-	-	3	-	-	-	-	3	-	-	-	-
	T	18	-	3	2	-	-	6	-	1	-	-	6	-	-	-	-
A 123 RHEUMATISM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
	T	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
A 124 OSTEOMYELITIS	M	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
A 125 ANKYLOSIS AND ACQUIRED DEFORMITIES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 126 OTHER	M	7	-	-	-	-	-	4	-	-	-	-	3	-	-	-	-
	F	8	-	1	-	-	-	3	-	1	-	-	1	1	-	-	1
	T	15	-	1	-	-	-	7	-	1	-	-	4	1	-	-	1
TOTAL (A121-A126)	M	20	-	2	1	-	-	8	-	1	-	-	8	-	-	-	-
	F	21	-	2	1	-	-	9	-	1	-	2	4	1	-	-	1
	T	41	-	4	2	-	-	17	-	2	-	2	12	1	-	-	1
XIV. CONGENITAL MALFORMATIONS.																	
A 127 SPINA BIFIDA AND MENINGOCELE.																	
A WITHOUT HYDROCEPHALUS	M	3	-	1	1	-	-	-	-	-	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	3	-	1	1	-	-	-	-	-	-	-	1	-	-	-	-
B WITH HYDROCEPHALUS	M	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
	F	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
	T	4	-	-	1	-	-	2	-	-	-	-	-	-	-	-	1
TOTAL (A127)	M	5	-	1	2	-	-	-	-	-	-	-	1	-	-	-	1
	F	2	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
	T	7	-	1	2	-	-	2	-	-	-	-	1	-	-	-	1
A 128 CIRCULATORY SYSTEM	M	49	-	3	1	1	1	14	3	2	-	4	11	1	3	1	4
	F	34	1	-	-	-	-	11	1	1	1	14	2	-	-	1	2
	T	83	1	3	1	1	1	25	4	3	1	4	25	3	3	2	6
A 129 OTHER	M	34	1	2	1	-	-	16	-	1	-	2	6	1	1	1	2
	F	25	-	1	-	-	2	9	5	1	-	2	3	-	1	-	1
	T	59	1	3	1	-	2	25	5	2	-	4	9	1	2	1	3
TOTAL (A127-A129)	M	88	1	6	4	1	1	30	1	3	-	6	18	2	4	1	7
	F	61	1	1	-	-	2	22	6	2	1	2	17	2	1	1	1
	T	149	1	7	4	1	3	52	9	1	1	1	35	4	5	1	10
XV. DISEASES OF EARLY INFANCY.																	
A 130 BIRTH INJURY	M	23	-	-	-	-	2	7	2	-	-	1	1	1	-	-	1
	F	20	-	-	-	1	-	4	4	1	-	2	6	2	-	-	-
	T	43	-	-	-	1	2	11	6	1	-	3	14	3	1	-	1
A 131 POSTNATAL ASPHYXIA AND ATELECTASIS	M	44	3	1	3	-	2	6	-	4	-	1	15	2	2	2	3
	F	32	-	3	1	-	-	10	-	1	1	1	10	2	1	-	2
	T	76	3	4	4	-	2	16	-	5	1	2	25	4	3	2	5
A 132 INFECTIONS OF NEWBORN	M	7	-	-	-	-	-	1	-	-	-	1	3	1	-	1	-
	F	3	-	1	-	-	-	1	-	-	-	-	1	-	-	-	-
	T	10	-	1	-	-	-	2	-	-	-	1	4	1	-	1	-
A 133 ERYTHROBLASTOSIS	M	5	-	-	-	-	-	1	-	-	-	-	3	-	-	1	-
	F	4	-	1	-	-	-	-	-	-	-	1	2	-	-	-	-
	T	9	-	1	-	-	-	1	-	-	-	1	5	-	-	1	-
A 134 OTHER DEFINED	M	2	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-
	F	6	-	-	-	-	-	-	1	1	-	-	2	-	-	1	1
	T	11	-	1	-	-	-	-	1	1	-	-	3	-	-	1	1

DIVISION OF VITAL STATISTICS

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	Total Alta.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
A 135	ILL-DEFINED	M 127	1	7	3	1	1	49	1	7	5	2	23	9	4	3	11
		F 101	1	5	-	2	1	32	1	8	3	3	26	7	4	2	6
		T 228	2	12	3	3	2	81	2	15	8	5	49	16	8	5	17
	TOTAL (A130-A135).	M 208	4	9	■	1	5	64	3	11	5	5	53	13	7	7	15
	XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.	F 166	1	10	1	3	1	47	6	11	4	7	47	11	5	3	■
		T 374	5	19	7	4	6	111	9	22	9	12	100	24	12	10	24
A 136	SENILITY WITHOUT PSYCHOSIS	M 18	-	-	-	-	-	2	-	-	1	2	10	1	-	-	2
		F 21	-	-	1	-	2	3	1	3	-	1	9	-	1	-	-
		T 39	-	-	1	-	2	5	1	3	1	3	19	1	1	-	2
A 137	ILL-DEFINED AND UNKNOWN ...	M 166	1	1	-	-	4	135	-	1	1	9	7	1	2	-	4
		F 72	-	2	1	-	1	55	-	1	-	7	3	-	2	-	-
		T 238	1	3	1	-	5	190	-	2	1	16	10	1	4	-	4
	TOTAL (A136, A137).	M 184	1	1	-	-	4	137	-	1	2	11	17	2	2	-	6
	XVII. ACCIDENTS, POISONINGS AND VIOLENCE.	F 93	-	2	2	-	3	58	1	4	-	■	12	-	3	-	-
		T 277	1	3	2	-	7	195	1	5	2	19	29	2	5	-	6
EXVII. EXTERNAL CAUSE.																	
AE 138 MOTOR VEHICLE ACCIDENTS.																	
A	TRAFFIC (810-825)	M 317	4	14	11	4	13	42	8	23	3	25	83	16	16	14	41
		F 102	4	5	5	-	1	23	3	6	2	5	32	1	2	1	12
		T 419	8	19	16	4	14	65	11	29	5	30	115	17	18	15	53
B	NON-TRAFFIC	M 11	1	-	1	-	-	3	1	-	-	1	3	-	-	-	1
		F 3	-	-	-	-	-	-	1	-	-	1	1	-	-	-	-
		T 14	1	-	1	-	-	3	2	-	-	2	4	-	-	-	1
	TOTAL (AE138).	M 328	5	14	12	4	13	45	9	23	3	26	86	16	16	14	42
		F 105	4	5	5	-	1	23	4	6	2	6	33	1	2	1	12
		T 433	9	19	17	4	14	68	13	29	5	32	119	17	18	15	54
A	DROWNINGS INVOLVING SMALL BOATS (850)	M 3	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-
		F 2	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
		T 5	-	-	-	-	-	-	1	-	-	-	2	2	-	-	-
B	DROWNINGS INVOLVING OTHER WATERCRAFT (851)	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	OTHER TRANSPORT	M 24	1	2	-	1	2	7	-	-	-	-	5	3	2	1	-
		F 1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T 25	2	2	-	1	2	7	-	-	-	-	5	3	2	1	-
	TOTAL (AE139).	M 27	1	2	-	1	2	7	-	-	-	-	7	4	2	1	-
		F 3	1	-	-	-	-	-	1	-	-	-	-	1	-	-	-
		T 30	2	2	-	1	2	7	-	1	-	-	7	5	2	1	-
AE 140	ACCIDENTAL POISONING	M 35	2	2	-	-	2	10	1	1	-	-	12	-	1	2	2
		F 7	-	-	-	-	-	1	-	-	-	-	6	-	-	-	-
		T 42	2	2	-	-	2	11	1	1	-	-	18	-	1	2	2
AE 141	ACCIDENTAL FALLS	M 71	4	2	1	3	-	20	5	2	2	2	25	4	-	-	1
		F 61	1	6	2	-	2	19	-	1	1	10	14	1	-	-	4
		T 132	5	8	3	3	2	39	5	3	3	12	39	5	-	-	5
AE 142	ACCIDENT CAUSED BY MACHINERY	M 20	-	1	3	-	2	5	1	-	-	1	6	-	1	-	-
		F 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
		T 21	-	1	3	-	2	5	1	-	-	1	6	-	1	-	1
AE 143	ACCIDENT CAUSED BY FIRE AND EXPLOSION	M 36	1	-	1	-	-	2	1	2	3	4	12	4	2	-	4
		F 18	2	-	-	-	-	1	1	1	-	-	2	4	2	-	5
		T 54	3	-	1	-	-	3	2	3	3	4	14	8	4	-	9
AE 144	OTHER ACCIDENTAL BURNS	M 2	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
		F 1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
		T 3	-	-	-	-	-	-	-	-	-	1	2	-	-	-	-
AE 145	ACCIDENT CAUSED BY FIREARM	M 14	1	1	1	-	-	1	2	2	-	-	3	2	-	-	1
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T 14	1	1	1	-	-	1	2	2	-	-	3	2	-	-	1
AE 146	ACCIDENTAL DROWNING	M 48	2	6	1	-	2	9	2	-	-	2	8	5	3	2	6
		F 9	-	1	-	1	-	-	1	1	-	-	3	1	-	-	1
		T 57	2	7	1	1	2	9	3	1	-	2	11	6	3	2	7
AE 147	ALL OTHER ACCIDENTAL CAUSES	M 48	2	3	-	-	2	12	1	4	1	-	15	-	3	3	2
		F 21	1	-	1	-	-	4	-	1	-	-	4	2	-	-	8
		T 69	3	3	1	-	2	16	1	5	1	-	19	2	3	3	10
	TOTAL (AE138-AE147).	M 629	18	31	19	8	23	111	22	34	9	36	175	35	28	22	58
		F 226	9	12	8	1	3	48	6	11	3	16	63	10	4	1	31
		T 855	27	43	27	9	26	159	28	45	12	52	238	45	32	23	89
AE 148	SUICIDE	M 110	2	8	-	-	5	28	4	3	3	5	26	5	8	4	9
		F 27	1	2	1	-	1	9	-	-	1	-	11	-	1	-	-
		T 137	3	10	1	-	6	37	4	3	4	5	37	5	9	4	9
AE 149	HOMICIDE	M 23	1	1	-	-	-	6	-	2	1	1	1	1	1	1	7
		F 14	-	-	1	-	-	6	-	2	-	-	4	1	-	-	-
		T 37	1	1	1	-	-	12	-	4	1	1	5	2	1	1	7

TABLE 4

CAUSE OF DEATH BY SEX FOR CENSUS DIVISIONS (INCLUDING CITIES, TOWNS AND VILLAGES) IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	Total Alta.	Census Div. 1	Census Div. 2	Census Div. 3	Census Div. 4	Census Div. 5	Census Div. 6	Census Div. 7	Census Div. 8	Census Div. 9	Census Div. 10	Census Div. 11	Census Div. 12	Census Div. 13	Census Div. 14	Census Div. 15
AE 150	WAR INJURIES	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	TOTAL (AE138-AE150).	M 762 F 267 T 1029	21 10 31	40 14 54	19 10 29	8 1 9	28 4 32	145 63 208	26 13 32	39 13 52	13 4 17	42 16 58	202 78 280	41 11 52	37 11 42	27 1 28	74 31 105
NXVII. NATURE OF INJURY.																	
AN 138	FRACTURE OF SKULL	M 138 F 29 T 167	2 - 2	9 - 9	7 2 9	2 - 2	6 - 6	23 6 29	6 1 7	6 - 6	4 2 6	3 11 43	33 10 43	6 1 7	9 1 10	- - -	22 5 27
AN 139	FRACTURE OF SPINE AND TRUNK	M 35 F 17 T 52	- - 2	1 1 1	1 - 1	1 - 1	3 3 3	4 3 7	2 1 3	2 - 2	- - -	1 5 6	11 4 15	5 1 6	1 - 1	2 - 2	1 2 3
AN 140	FRACTURE OF LIMBS	M 46 F 55 T 101	3 1 4	2 6 8	1 2 3	3 - 3	- 2 2	13 14 27	3 1 3	2 1 3	1 1 2	2 9 11	9 14 23	4 1 5	- - -	2 1 3	1 3 4
AN 141	DISLOCATION WITHOUT FRACTURE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 142	SPRAINS AND STRAINS	M 1 F - T 1	- - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	1 - -	- - -
AN 143	OTHER HEAD INJURY	M 127 F 27 T 154	3 2 5	7 2 9	1 - 1	2 1 2	4 10 5	28 1 38	3 1 4	6 - 6	2 - 2	29 8 37	7 1 8	7 1 9	9 - 9	6 - 6	12 2 14
AN 144	INTERNAL INJURY	M 187 F 46 T 233	2 3 5	7 2 9	7 4 11	- - -	9 1 10	31 12 43	7 1 8	13 3 16	3 - 3	16 1 17	48 13 61	7 1 7	7 1 8	8 - 8	22 5 27
AN 145	OPEN WOUNDS	M 14 F 3 T 17	2 - 2	1 - 1	- - -	- - -	- 1 3	2 - -	- - -	- - -	1 - 1	- 1 6	5 - 1	- 1 1	- - -	2 - 2	1 - 1
AN 146	SUPERFICIAL INJURY OR CONTUSION	M - F 2 T 2	- 2 2	- - -	- - -	- - -	- 2 2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 147	FOREIGN BODY THROUGH ORIFICE	M 16 F 4 T 20	2 1 3	- - -	- - -	- - -	- - 2	2 - -	- - 1	1 - -	- - -	- - -	8 - 11	- - -	2 - 2	1 - 1	- 3 3
AN 148	BURNS	M 35 F 17 T 52	1 1 2	- - -	- - -	- - -	- 1 5	4 1 5	1 1 2	1 - 1	- - -	6 4 16	12 4 16	4 4 11	1 2 3	- - -	5 4 9
AN 149	POISONINGS	M 72 F 33 T 105	4 2 6	5 1 6	- 1 1	- - -	4 - 4	19 7 26	2 - 2	5 4 9	1 1 2	- 16 39	23 - 1	1 - 3	3 - 3	2 - 2	3 1 4
AN 150	OTHER	M 91 F 34 T 125	2 - 2	8 2 10	2 1 3	2 1 1	19 7 26	2 1 2	3 5 3	3 - 8	1 - 1	6 8 14	24 - 32	7 2 9	5 1 6	3 - 3	7 6 13
	TOTAL (AN138-AN150).	M 762 F 267 T 1029	21 10 31	40 14 54	19 10 29	8 1 9	28 4 32	145 63 208	26 13 32	39 13 52	13 4 17	42 16 58	202 78 280	41 11 52	37 11 42	27 1 28	74 31 105
	ALL CAUSES.	M 5895 F 3628 T 9523	171 145 316	348 207 555	145 96 241	76 34 110	195 96 291	1433 978 2411	192 123 315	340 209 549	89 59 148	411 244 655	1639 1003 2642	214 125 339	217 111 328	92 30 122	333 168 501

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A		CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)												
I. INFECTIVE AND PARASITIC DISEASES.				1,000	5,000	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
TUBERCULOSIS (A1-A5).		TOTAL	RURAL TOTAL	TO 4,999	AND OVER									
A	1 RESPIRATORY.													
	■ ACTIVE	M 22	11	-	11	4	-	6	-	1	-	-	-	-
		F 6	3	-	3	-	-	3	-	-	-	-	-	-
		T 28	14	-	14	4	-	9	-	1	-	-	-	-
	B INACTIVE (002.2, 008.2) ..	M 1	-	-	1	-	-	1	-	-	-	-	-	-
		F 2	2	-	-	-	-	-	-	-	-	-	-	-
		T 3	2	-	1	-	-	1	-	-	-	-	-	-
	TOTAL (A1).	M 23	11	-	12	4	-	7	-	1	-	-	-	-
		F 8	5	-	3	-	-	3	-	-	-	-	-	-
		T 31	16	-	15	4	-	10	-	1	-	-	-	-
A	2 MENINGES AND CENTRAL NERVOUS SYSTEM	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	3 INTESTINE, PERITONEUM AND MESENTERY	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	4 BONE AND JOINT	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
■	5 OTHER FORMS	M 1	1	-	-	-	-	-	-	-	-	-	-	-
		F 1	-	-	1	-	-	-	-	-	1	-	-	-
		T 2	1	-	1	-	-	-	-	-	1	-	-	-
	TOTAL (A1-A5).	M 24	12	-	12	4	-	7	-	1	-	-	-	-
		F 9	5	-	4	-	-	3	-	-	1	-	-	-
		T 33	17	-	16	4	-	10	-	1	1	-	-	-
SYPHILIS (A6-A10).														
A	6 CONGENITAL	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	7 EARLY	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	8 TABES DORSALIS	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	9 GENERAL PARESIS	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	10 OTHERS	M 6	2	-	4	3	-	1	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T 6	2	-	4	3	-	1	-	-	-	-	-	-
	TOTAL (A6-A10).	M 6	2	-	4	3	-	1	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T 6	2	-	4	3	-	1	-	-	-	-	-	-
A	11 GONOCOCCAL INFECTION	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	12 TYPHOID	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	13 PARATYPHOID AND OTHER SALMONELLA	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	14 CHOLERA	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	15 BRUCELLOSIS	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-
A	16 DYSENTERY	M -	-	-	-	-	-	-	-	-	-	-	-	-
		F -	-	-	-	-	-	-	-	-	-	-	-	-
		T -	-	-	-	-	-	-	-	-	-	-	-	-

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

[illegible]

DIVISION OF VITAL STATISTICS

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
A 39	HYDATID DISEASE	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	FILARIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	ANKYLSTOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	OTHER DISEASES DUE TO HELMINTHS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	OTHER	M	2	-	-	2	-	-	1	-	1	-	-	-	-
		F	5	3	-	2	1	-	1	-	-	-	-	-	-
		T	7	3	-	4	1	-	2	-	1	-	-	-	-
	TOTAL (A1-A43).	M	42	18	1	23	9	-	12	-	2	-	-	-	-
		F	29	16	2	11	4	-	5	-	-	1	1	-	-
		T	71	34	3	34	13	-	17	-	2	1	1	-	-
II. NEOPLASMS.															
MALIGNANT NEOPLASMS (A44-A59).															
A 44	BUCCAL CAVITY AND PHARYNX	M	21	4	2	15	5	-	10	-	-	-	-	-	-
		F	7	1	1	5	1	-	3	-	1	-	-	-	-
		T	28	5	3	20	6	-	13	-	1	-	-	-	-
A 45	ESOPHAGUS	M	22	8	4	10	3	-	6	1	-	-	-	-	-
		F	8	2	-	6	2	1	3	-	-	-	-	-	-
		T	30	10	4	16	5	1	9	1	-	-	-	-	-
A 46	STOMACH	M	115	47	10	58	14	6	28	1	5	3	1	-	-
		F	55	22	6	27	13	-	8	2	1	2	-	-	1
		T	170	69	16	85	27	6	36	3	6	5	1	-	1
A 47	INTESTINE, EXCEPT RECTUM ..	M	94	38	9	47	16	2	19	2	2	3	2	1	-
		F	96	20	11	65	24	1	25	2	5	5	2	-	1
		T	190	58	20	112	40	3	44	4	7	8	4	1	1
A 48	RECTUM	M	51	13	7	31	10	-	16	1	1	3	-	-	-
		F	31	9	3	19	4	1	7	1	1	3	2	-	-
		T	82	22	10	50	14	1	23	2	2	6	2	-	-
A 49	LARYNX	M	15	3	7	5	3	-	1	-	-	1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	15	3	7	5	3	-	1	-	-	1	-	-	-
A 50	TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY	M	209	70	18	121	52	1	53	1	4	3	4	2	1
		F	42	12	6	24	7	-	8	-	3	4	2	-	-
		T	251	82	24	145	59	1	61	1	7	7	6	2	1
A 51	BREAST	M	1	1	-	-	-	-	-	-	-	-	-	-	-
		F	155	48	22	85	37	2	35	1	4	4	-	1	1
		T	156	49	22	85	37	2	35	1	4	4	-	1	1
A 52	CERVIX UTERI	F	31	5	4	22	13	-	8	-	1	-	-	-	-
A 53	UTERUS, OTHER PARTS	F	18	5	1	12	4	2	5	-	-	1	-	-	-
A 54	PROSTATE	M	99	24	18	57	20	1	23	2	4	4	2	-	1
A 55	SKIN	M	14	8	-	6	1	-	4	1	-	-	-	-	-
		F	6	3	-	3	2	1	-	-	-	-	-	-	-
		T	20	11	-	9	3	1	4	1	-	-	-	-	-
A 56	BONE AND CONNECTIVE TISSUE	M	10	1	2	7	3	-	2	1	1	-	-	-	-
		F	10	2	-	8	4	-	2	-	-	-	1	1	-
		T	20	3	2	15	7	-	4	1	1	-	1	1	-
A 57	OTHER AND UNSPECIFIED SITES.														
A	DIGESTIVE ORGANS	M	96	34	10	52	18	3	19	2	3	3	4	-	-
	(155-159)	F	70	13	15	42	15	-	18	-	2	6	1	-	-
		T	166	47	25	94	33	3	37	2	5	9	5	-	-
B	RESPIRATORY ORGANS	M	3	-	-	3	-	1	2	-	-	-	-	-	-
	(160, 164, 165)	F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	-	-	3	-	1	2	-	-	-	-	-	-

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
C	URINARY ORGANS	M	68	27	7	34	9	1	20	1	-	2	-	-	1
	(180, 181)	F	27	10	3	14	6	-	5	-	-	2	1	-	-
		T	95	37	10	48	15	1	25	1	-	4	1	-	1
D	BRAIN AND NERVOUS SYSTEM (193)	M	33	14	5	14	6	-	8	-	-	-	-	-	-
		F	19	2	-	17	5	-	10	-	1	1	-	-	-
		T	52	16	5	31	11	-	18	-	1	1	-	-	-
E	OTHER	M	36	10	4	22	7	1	12	-	-	-	1	1	-
		F	97	20	12	65	25	2	28	1	2	3	2	2	-
		T	133	30	16	87	32	3	40	1	2	3	3	3	-
	TOTAL (A57).	M	236	85	26	125	40	6	61	3	3	5	5	1	1
		F	213	45	30	138	51	2	61	1	5	12	4	2	-
		T	449	130	56	263	91	8	122	4	8	17	9	3	1
A 58	LEUKAEMIA AND ALEUKAEMIA ..	M	56	21	5	30	13	-	9	1	4	3	-	-	-
		F	31	7	3	21	12	-	3	1	2	3	-	-	-
		T	87	28	8	51	25	-	12	2	6	6	-	-	-
A 59	LYMPHATIC AND HAEMATOPOIETIC SYSTEM.														
A	HODGKIN'S (201)	M	19	7	-	12	6	-	5	-	-	-	1	-	-
		F	7	1	3	3	-	1	2	-	-	-	-	-	-
		T	26	8	3	15	6	1	7	-	-	-	1	-	-
B	OTHER	M	44	12	3	29	15	-	9	-	2	1	-	1	1
		F	23	4	3	16	7	1	5	-	1	1	1	-	-
		T	67	16	6	45	22	1	14	-	3	2	1	1	1
	TOTAL (A59).	M	63	19	3	41	21	-	14	-	2	1	1	1	1
		F	30	5	6	19	7	2	7	-	1	1	1	-	-
		T	93	24	9	60	28	2	21	-	3	2	2	1	1
	TOTAL (A44-A59).	M	1006	342	111	553	201	16	246	14	26	26	15	5	4
		F	733	186	93	454	181	12	175	8	24	35	12	4	3
		T	1739	528	204	1007	382	28	421	22	50	61	27	9	7
A 60	BENIGN AND UNSPECIFIED	M	9	4	2	3	-	-	2	-	-	-	1	-	-
		F	9	1	1	7	3	-	2	-	1	-	1	-	-
		T	18	5	3	10	3	-	4	-	1	-	2	-	-
	TOTAL (A44-A60).	M	1015	346	113	556	201	16	248	14	26	26	16	5	4
		F	742	187	94	461	184	12	177	8	25	35	13	4	3
		T	1757	533	207	1017	385	28	425	22	51	61	29	9	7
III, IV. ALLERGIC, ENDOCRINE, METABOLIC AND BLOOD DISEASES.															
A 61	NON-TOXIC GOITRE	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 62	THYROTOXICOSIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 63	DIABETES MELLITUS	M	90	25	15	50	23	2	14	-	5	-	4	2	-
		F	89	15	17	57	22	1	21	1	5	2	2	1	2
		T	179	40	32	107	45	3	35	1	10	2	6	3	2
A 64	NUTRITIONAL DEFICIENCY STATES	M	3	2	-	1	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	2	-	1	-	-	1	-	-	-	-	-	-
A 65	ANAEMIAS	M	11	3	4	4	2	-	2	-	-	-	-	-	-
		F	6	2	2	2	-	-	1	-	-	-	-	1	-
		T	17	5	6	6	2	-	3	-	-	-	-	1	-
A 66	OTHER	M	37	17	3	17	7	1	6	-	2	1	-	-	-
		F	25	5	3	17	10	-	5	-	1	-	-	-	1
		T	62	22	6	34	17	1	11	-	3	1	-	-	1
	TOTAL (A61-A66).	M	141	47	22	72	32	3	23	-	7	1	4	2	-
		F	120	22	76	32	32	1	27	1	6	2	2	2	1
		T	261	69	44	148	64	4	50	1	13	3	6	4	1
V. MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.															
A 67	PSYCHOSES	M	4	2	-	2	1	-	1	-	-	-	-	-	-
		F	3	-	1	2	-	-	2	-	-	-	-	-	-
		T	7	2	1	4	1	-	3	-	-	-	-	-	-

DIVISION OF VITAL STATISTICS

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
A 68	PSYCHONEUROTIC AND PERSONALITY DISORDERS	M	20	5	2	13	5	-	6	-	-	-	-	1	1
		F	3	2	-	1	1	-	-	-	-	-	-	-	-
		T	23	7	2	14	6	-	6	-	-	-	-	1	1
A 69	MENTAL DEFICIENCY	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL (A67-A69)	M	24	7	2	15	6	-	7	-	-	-	-	1	1
		F	6	2	1	3	1	-	2	-	-	-	-	1	1
		T	30	9	3	18	7	-	9	-	-	-	-	1	1
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.															
A 70	CEREBROVASCULAR LESIONS	M	549	154	90	305	132	12	89	6	20	21	18	1	6
		F	470	116	70	284	119	14	94	3	18	21	11	1	3
		T	1019	270	160	589	251	26	183	9	38	42	29	2	9
A 71	NON-MENINGOCOCCAL MENINGITIS	M	3	1	1	1	-	-	1	-	-	-	-	-	-
		F	3	1	1	1	-	-	1	-	-	-	-	-	-
		T	6	2	2	2	-	-	2	-	-	-	-	-	-
A 72	MULTIPLE SCLEROSIS	M	4	1	1	2	1	-	1	-	-	-	-	-	-
		F	10	1	1	8	2	-	4	-	2	-	-	-	-
		T	14	2	2	10	3	-	5	-	2	-	-	-	-
A 73	EPILEPSY	M	11	3	-	8	5	-	3	-	-	-	-	-	-
		F	8	4	-	4	1	-	2	-	-	-	1	-	-
		T	19	7	-	12	6	-	5	-	-	-	1	-	-
A 74	INFLAMMATORY DISEASES OF THE EYE	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 75	CATARACT	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 76	GLAUCOMA	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 77	OTITIS MEDIA AND MASTOIDITIS	M	3	-	-	3	2	-	-	-	1	-	-	-	-
		F	1	-	-	1	-	-	1	-	-	-	-	-	-
		T	4	-	-	4	2	-	1	-	1	-	-	-	-
A 78	OTHER	M	30	5	4	21	6	-	9	1	2	-	2	1	-
		F	33	7	8	18	10	-	6	-	-	1	1	-	-
		T	63	12	12	39	16	-	15	1	2	1	3	1	-
	TOTAL (A70-A78)	M	600	164	96	340	146	12	103	7	23	21	20	2	6
		F	525	129	80	316	132	14	108	3	20	22	13	1	3
		T	1125	293	176	656	278	26	211	10	43	43	33	3	9
VII. DISEASES OF THE CIRCULATORY SYSTEM.															
HEART DISEASE (A79-A83).															
A 79	RHEUMATIC FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 80	CHRONIC RHEUMATIC	M	26	10	3	13	6	-	7	-	-	-	-	-	-
		F	54	13	5	36	17	1	14	-	1	1	2	-	-
		T	80	23	8	49	23	1	21	-	1	1	2	-	-
A 81	ARTERIOSCLEROTIC AND DEGENERATIVE	M	1792	586	263	943	267	30	453	17	79	53	26	10	8
		F	871	229	154	488	163	24	194	7	35	38	10	12	5
		T	2663	815	417	1431	430	54	647	24	114	91	36	22	13
A 82	OTHER	M	92	25	23	44	23	-	18	-	1	-	2	-	-
		F	72	21	16	35	15	-	17	-	3	-	-	-	-
		T	164	46	39	79	38	-	35	-	4	-	2	-	-
A 83	HYPERTENSIVE	M	33	11	4	18	6	-	11	-	-	-	-	-	1
		F	37	5	7	25	8	-	15	1	1	-	-	-	-
		T	70	16	11	43	14	-	26	1	1	-	-	-	1
	TOTAL (A79-A83)	M	1943	632	293	1018	302	30	489	17	80	53	28	10	9
		F	1034	268	182	584	203	25	240	8	40	39	12	12	5
		T	2977	900	475	1602	505	55	729	25	120	92	40	22	14
A 84	HYPERTENSION	M	26	5	4	17	8	-	7	-	1	1	-	-	-
		F	20	5	3	12	8	-	3	-	1	-	-	-	-
		T	46	10	7	29	16	-	10	-	2	1	-	-	-

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
A 85	ARTERIAL DISEASES	M	149	39	23	87	42	4	29	2	7	2	1	-	-
		F	112	32	17	63	25	1	28	2	2	4	1	-	-
		T	261	71	40	150	67	5	57	4	9	6	2	-	-
A 86	OTHER	M	40	13	2	25	6	1	12	2	1	3	-	-	-
		F	26	11	2	16	5	-	9	-	1	1	-	-	-
		T	66	24	4	41	11	1	21	2	2	4	-	-	-
TOTAL (A79-A86)			M 2158	689	322	1147	358	35	537	21	89	59	29	110	9
		F	1192	313	204	675	241	26	280	10	44	44	13	12	5
		T	3350	1002	526	1822	599	61	817	31	133	103	42	22	14
VIII. DISEASES OF THE RESPIRATORY SYSTEM.															
A 87	ACUTE UPPER RESPIRATORY ...	M	6	2	-	4	1	-	3	-	-	-	-	-	-
		F	3	1	-	2	1	-	1	-	-	-	-	-	-
		T	9	3	-	6	2	-	4	-	-	-	-	-	-
A 88	INFLUENZA	M	11	2	-	6	1	4	-	-	-	1	-	-	-
		F	4	1	1	2	2	-	-	-	-	-	-	-	-
		T	12	3	1	8	3	4	-	-	-	1	-	-	-
PNEUMONIA (A89-A91).															
A 89	LOBAR	M	15	3	3	9	3	-	5	-	1	-	-	-	-
		F	12	3	3	6	4	-	2	-	-	-	-	-	-
		T	27	6	6	15	7	-	7	-	1	-	-	-	-
A 90	BRONCHO	M	96	27	18	51	14	14	16	-	2	2	1	2	-
		F	75	18	10	47	12	6	25	-	1	2	-	1	-
		T	171	45	28	98	26	20	41	-	3	4	1	3	-
A 91	ATYPICAL, OTHER, UNSPECIFIED	M	59	14	5	40	17	1	18	-	-	-	1	-	1
		F	42	11	7	24	9	-	7	-	5	-	2	-	1
		T	101	25	12	64	26	1	25	-	5	-	5	-	2
TOTAL (A89-A91)			M 170	44	26	100	34	15	39	-	3	2	4	2	1
		F	129	32	20	77	25	6	34	-	6	2	2	1	1
		T	299	76	46	177	59	21	73	-	9	4	6	3	2
BRONCHITIS (A92, A93).															
A 92	ACUTE	M	2	1	1	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	1	-	-	1	-	-	-	-	-	-
		T	3	1	1	1	-	-	1	-	-	-	-	-	-
A 93	CHRONIC AND UNQUALIFIED ...	M	61	22	10	29	14	-	12	1	2	-	-	-	-
		F	13	6	1	6	3	-	2	-	-	-	1	-	-
		T	74	28	11	35	17	-	14	1	2	-	1	-	-
TOTAL (A92, A93)			M 63	23	11	29	14	-	12	1	2	-	-	-	-
		F	14	6	1	7	3	-	3	-	-	-	1	-	-
		T	77	29	12	36	17	-	15	1	2	-	1	-	-
A 94	TONSILS AND ADENOIDS	M	2	2	-	-	-	-	-	-	-	-	-	-	-
		F	2	1	1	-	-	-	-	-	-	-	-	-	-
		T	4	3	1	-	-	-	-	-	-	-	-	-	-
A 95	EMPHYEMA AND LUNG ABSCESS ..	M	2	1	-	1	1	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	2	1	-	1	1	-	-	-	-	-	-	-	-
A 96	PLEURISY	M	2	2	-	-	-	-	-	-	-	-	-	-	-
		F	3	1	1	1	1	-	-	-	-	-	-	-	-
		T	5	3	1	1	1	-	-	-	-	-	-	-	-
A 97	OTHER	M	103	22	15	66	22	1	30	2	6	3	1	1	-
		F	37	6	5	26	11	-	11	-	-	1	2	-	1
		T	140	28	20	92	33	1	41	2	6	4	3	1	1
TOTAL (A87-A97)			M 356	98	52	206	73	20	84	11	11	4	5	3	1
		F	192	41	29	115	43	6	49	-	6	3	5	1	2
		T	548	146	81	321	116	26	133	3	17	9	10	4	3
IX. DISEASES OF THE DIGESTIVE SYSTEM.															
A 98	DISEASES OF THE TEETH	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 99	ULCER OF THE STOMACH	M	15	5	2	8	3	-	3	-	1	-	1	-	-
		F	9	3	3	3	3	-	-	-	-	-	-	-	-
		T	24	8	5	11	6	-	3	-	1	-	1	-	-
A 100	ULCER OF THE DUODENUM	M	21	4	6	11	3	-	6	-	2	-	-	-	-
		F	11	3	-	8	2	-	4	-	1	-	1	-	-
		T	32	7	6	19	5	-	10	-	3	-	1	-	-

DIVISION OF VITAL STATISTICS

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
A 101	GASTRITIS AND DUODENITIS ..	M	1	-	1	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	-	1	-	-	-	-	-	-	-	-	-	-
A 102	APPENDICITIS	M	7	2	-	5	3	-	1	-	-	-	1	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	7	2	-	5	3	-	1	-	-	-	1	-	-
A 103	INTESTINAL OBSTRUCTION AND HERNIA	M	36	14	3	19	12	-	4	-	2	-	1	-	-
		F	23	4	7	12	3	-	4	-	2	1	2	-	-
		T	59	18	10	31	15	-	8	-	4	1	3	-	-
A 104	GASTRO-ENTERITIS AND	M	20	11	2	7	2	-	3	2	-	-	-	-	-
	COLITIS	F	36	10	7	19	6	3	7	-	1	2	-	-	-
		T	56	21	9	26	8	3	10	2	1	2	-	-	-
A 105	CIRRHOSIS OF LIVER	M	48	8	4	36	18	3	10	2	1	1	-	1	-
		F	29	3	4	22	8	1	12	-	-	-	-	-	1
		T	77	11	8	58	26	4	22	2	1	1	-	1	1
A 106	CHOLELITHIASIS AND CHOLECY- STITIS	M	17	6	2	9	3	1	4	-	-	-	1	-	-
		F	27	8	10	9	2	-	5	-	1	1	-	-	-
		T	44	14	12	18	5	1	9	-	1	1	1	-	-
A 107	OTHER	M	43	13	13	17	11	-	4	-	1	-	1	-	-
		F	20	6	4	10	7	1	1	-	1	-	-	-	-
		T	63	19	17	27	18	1	5	-	2	-	1	-	-
TOTAL (A98-A107)			M 208	11	33	112	55	4	35	4	7	1	5	1	-
		F	155	37	35	83	31	5	33	-	6	4	3	-	1
		T	363	100	111	195	86	9	68	4	13	5	8	1	1
X. DISEASES OF THE GENITO- URINARY SYSTEM.															
A 108	ACUTE NEPHRITIS	M	2	-	1	1	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	2	-	1	1	-	-	1	-	-	-	-	-	-
A 109	CHRONIC AND OTHER NEPHRITIS	M	30	11	4	15	7	1	4	-	2	1	-	-	-
		F	20	5	2	13	8	-	5	-	-	-	-	-	-
		T	50	16	6	28	15	1	9	-	2	1	-	-	-
A 110	INFECTIONS OF KIDNEY	M	22	10	1	11	5	-	3	-	-	2	1	-	-
		F	19	4	3	12	3	-	4	2	1	1	1	-	-
		T	41	14	4	23	8	-	7	2	1	3	2	-	-
A 111	CALCULI	M	2	-	-	2	-	-	2	-	-	-	-	-	-
		F	4	1	-	3	-	-	2	-	1	-	-	-	-
		T	6	1	-	5	-	-	4	-	1	-	-	-	-
A 112	HYPERPLASIA OF PROSTATE ...	M	27	8	5	14	9	1	1	-	2	1	-	-	-
A 113	BREAST	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 114	OTHER	M	6	2	1	3	-	-	3	-	-	-	-	-	-
		F	11	1	1	9	6	-	2	-	-	1	-	-	-
		T	17	3	2	12	6	-	5	-	-	1	-	-	-
TOTAL (A108-A114)			M 44	31	12	46	21	2	14	-	4	4	1	-	-
		F	54	11	6	37	17	-	13	2	2	2	1	-	-
		T	143	42	18	83	38	2	27	2	6	6	2	-	-
XI. COMPLICATIONS OF PREG- NANCY, CHILDBIRTH, AND PUERPERIUM.															
A 115	SEPSIS	F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 116	TOXAEMIA	F	2	2	-	-	-	-	-	-	-	-	-	-	-
A 117	HAEMORRHAGE	F	2	1	-	1	-	-	1	-	-	-	-	-	-
A 118	ABORTION WITHOUT SEPSIS OR TOXAEMIA	F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 119	ABORTION WITH SEPSIS	F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 120	OTHER	F	1	-	-	1	-	-	1	-	-	-	-	-	-
TOTAL (A115-A120)			F 5	3	-	2	-	-	2	-	-	-	-	-	-

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST # (SEVENTH REVISION)	TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM.														
A 121	SKIN INFECTIONS	M 2	-	-	2	1	-	1	-	-	-	-	-	-
	F 3	2	1	-	-	-	-	-	-	-	-	-	-	-
	T 5	2	1	2	1	1	-	1	-	-	-	-	-	-
A 122	ARTHRITIS AND SPONDYLITIS	M 10	2	3	5	2	-	3	-	-	-	-	-	-
	F 11	1	1	6	3	-	-	2	-	1	-	-	-	-
	T 18	3	4	11	5	-	-	5	-	1	-	-	-	-
A 123	RHEUMATISM	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F 2	-	-	2	2	-	-	-	-	-	-	-	-	-
	T 2	-	-	2	2	-	-	-	-	-	-	-	-	-
A 124	OSTEOMYELITIS	M 1	-	1	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T 1	-	1	-	-	-	-	-	-	-	-	-	-	-
A 125	ANKYLOSIS AND ACQUIRED DEFORMITIES	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 126	OTHER	M 7	-	-	7	4	-	3	-	-	-	-	-	-
	F 8	1	6	3	-	1	-	1	-	-	-	1	-	-
	T 15	1	13	7	-	4	-	1	-	-	-	1	-	-
TOTAL (A121-A126).		M 20	2	14	7	-	7	-	-	-	-	-	-	-
	F 21	4	14	11	-	3	-	1	1	-	-	1	-	-
	T 41	6	28	15	-	10	-	1	1	-	-	1	-	-
XIV. CONGENITAL MALFORMATIONS.														
A 127	SPINA BIFIDA AND MENINGOCELE.													
A	WITHOUT HYDROCEPHALUS	M 3	-	2	1	-	-	1	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T 3	-	2	1	-	-	-	1	-	-	-	-	-	-
B	WITH HYDROCEPHALUS	M 2	-	2	-	-	-	-	-	-	-	-	-	-
	F 2	-	2	2	-	-	-	-	-	-	-	-	-	-
	T 4	-	2	2	-	-	-	-	-	-	-	-	-	-
TOTAL (A127).		M 5	-	4	1	-	-	1	-	-	-	-	-	-
	F 2	-	2	2	-	-	-	-	-	-	-	-	-	-
	T 7	-	4	3	-	1	-	-	-	-	-	-	-	-
A 128	CIRCULATORY SYSTEM	M 49	16	6	27	12	1	10	1	2	-	-	1	-
	F 34	5	5	24	9	-	-	13	-	-	1	1	-	-
	T 83	21	11	51	21	1	23	1	2	1	1	1	-	-
A 129	OTHER	M 34	8	3	23	13	1	5	-	2	1	-	-	1
	F 25	9	4	12	9	-	3	-	-	-	-	-	-	-
	T 59	17	7	35	22	1	4	-	2	1	-	-	-	1
TOTAL (A127-A129).		M 88	24	13	51	25	2	16	1	4	1	-	1	1
	F 61	14	9	20	12	-	16	-	-	1	1	-	-	-
	T 149	38	22	89	45	2	32	1	4	2	1	1	1	1
XV. DISEASES OF EARLY INFANCY.														
A 130	BIRTH INJURY	M 23	6	5	12	7	-	1	-	-	-	-	-	-
	F 20	11	3	11	4	1	6	-	-	-	-	-	-	-
	T 43	12	8	23	11	1	11	-	-	-	-	-	-	-
A 131	POSTNATAL ASPHYXIA AND ATELECTASIS	M 44	12	4	28	6	1	14	-	1	3	3	-	-
	F 32	5	6	21	10	-	8	-	2	-	1	-	-	-
	T 76	17	10	49	16	1	22	-	3	3	4	-	-	-
A 132	INFECTIONS OF NEWBORN	M 7	2	2	3	-	-	3	-	-	-	-	-	-
	F 3	1	1	1	1	-	-	-	-	-	-	-	-	-
	T 10	3	3	4	1	-	3	-	-	-	-	-	-	-
A 133	ERYTHROBLASTOSIS	M 5	1	1	3	1	-	2	-	-	-	-	-	-
	F 4	1	-	3	-	-	2	-	1	-	-	-	-	-
	T 9	2	1	6	1	-	4	-	1	-	-	-	-	-
A 134	OTHER DEFINED	M 2	-	1	1	-	-	1	-	-	-	-	-	-
	F 2	2	2	2	-	-	2	-	-	-	-	-	-	-
	T 8	2	3	3	-	-	3	-	-	-	-	-	-	-

DIVISION OF VITAL STATISTICS

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
A 135	ILL-DEFINED	M 127 F 101 T 228	34 29 63	18 13 31	75 59 134	47 31 78	1 - 1	18 21 39	1 - 1	4 3 7	1 1 2	3 3 6	- - -	- - -
	TOTAL (A130-A135)	M 208 F 166 T 374	55 44 99	31 25 56	122 97 219	61 44 107	2 1 3	43 39 82	1 - 1	5 4 11	4 1 5	6 4 10	- - -	- - -
XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.														
A 136	SENILITY WITHOUT PSYCHOSIS	M 18 F 21 T 39	2 4 6	2 3 5	14 14 28	2 3 5	2 1 3	10 9 19	- - -	- - -	- - -	- 1 1	- - -	- - -
A 137	ILL-DEFINED AND UNKNOWN ...	M 166 F 72 T 238	17 6 23	5 2 7	144 64 208	131 55 186	5 5 10	8 2 7	- - -	1 2 3	1 - 1	- - -	- - -	1 - 1
	TOTAL (A136, A137)	M 184 F 93 T 277	19 10 29	7 5 12	158 78 236	133 58 191	7 6 13	15 11 26	- - -	1 2 3	1 - 1	- 1 1	- - -	1 - 1
XVII. ACCIDENTS, POISONINGS AND VIOLENCE.														
EXVII. EXTERNAL CAUSE.														
AE 138 MOTOR VEHICLE ACCIDENTS.														
A	TRAFFIC (810-825)	M 317 F 102 T 419	151 41 192	48 13 61	118 48 166	32 17 49	1 2 3	60 24 84	11 - 11	7 1 8	2 2 4	3 1 4	- 1 1	2 - 2
B	NON-TRAFFIC	M 11 F 3 T 14	5 2 7	2 - 2	4 1 5	2 - 2	- - -	2 1 3	- - -	- - -	- - -	- - -	- - -	- - -
	TOTAL (AE138)	M 328 F 105 T 433	156 43 199	50 13 63	122 49 171	34 17 51	1 2 3	62 25 87	11 - 11	7 1 8	2 2 4	3 1 4	- 1 1	2 - 2
AE 139 OTHER TRANSPORT ACCIDENTS.														
A	DROWNINGS INVOLVING SMALL BOATS (850)	M 3 F 2 T 5	2 1 3	- 1 1	1 - 1	- - -	- - -	1 - 1	- - -	- - -	- - -	- - -	- - -	- - -
B	DROWNINGS INVOLVING OTHER WATERCRAFT (851)	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
C	OTHER TRANSPORT	M 24 F 1 T 25	10 - 10	3 - 3	11 1 12	7 - 7	- - -	1 - 1	- - -	2 - 2	- 1 1	- - -	- - -	1 - 1
	TOTAL (AE139)	M 27 F 3 T 30	12 1 13	3 1 4	12 1 13	7 - 7	- - -	2 - 2	- - -	2 - 2	- 1 1	- - -	- - -	1 - 1
AE 140	ACCIDENTAL POISONING	M 35 F 7 T 42	10 - 10	4 - 4	21 7 28	10 1 11	- - -	8 5 13	1 - 1	2 - 2	- - -	- - -	- 1 1	- - -
AE 141	ACCIDENTAL FALLS	M 71 F 61 T 132	14 14 28	12 7 19	45 40 85	17 16 33	2 6 8	21 13 34	- - -	1 3 4	3 1 4	- 1 1	1 - 1	- - -
AE 142	ACCIDENT CAUSED BY MACHINERY	M 20 F 1 T 21	9 - 9	1 1 2	10 - 10	4 - 4	- - -	5 - 5	- - -	1 - 1	- - -	- - -	- - -	- - -
AE 143	ACCIDENT CAUSED BY FIRE AND EXPLOSION	M 36 F 18 T 54	16 14 30	7 - 7	13 4 17	1 1 2	- - -	9 1 10	- - -	- - -	1 1 2	1 1 2	- - -	1 - 1
AE 144	OTHER ACCIDENTAL BURNS	M 2 F 1 T 3	- - -	1 - 1	1 1 2	- - -	- - -	1 1 2	- - -	- - -	- - -	- - -	- - -	- - -
AE 145	ACCIDENT CAUSED BY FIREARM	M 14 F - T 14	7 - 7	2 - 2	5 - 5	1 - 1	- - -	2 - 2	- - -	- - -	- - -	1 - 1	- - -	1 - 1
AE 146	ACCIDENTAL DROWNING	M 48 F 9 T 57	29 5 34	5 1 6	14 3 17	7 - 7	- - -	3 3 6	- - -	1 - 3	1 - 1	- - -	- - -	- - -

TABLE 5

CAUSE OF DEATH BY SEX, RURAL AND URBAN AND FOR URBAN PLACES OF 5,000 POPULATION AND OVER IN ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST # (SEVENTH REVISION)	TOTAL	RURAL TOTAL	1,000 TO 4,999	5,000 AND OVER	Calgary	Camrose	Edmonton	Grande Prairie	Lethbridge	Medicine Hat	Red Deer	St. Albert	Wetaskiwin
AE 147	ALL OTHER ACCIDENTAL CAUSES	M 48 F 21 T 69	16 10 26	7 3 10	25 8 33	9 4 13	- - -	13 2 15	- 1 1	2 - 2	- 1 1	1 - 1	- - -	- - -
	TOTAL (AE138-AE147).....	M 629 F 226 T 855	269 87 356	92 26 118	268 113 381	90 39 129	3 11 11	126 50 176	12 1 13	18 4 22	7 6 13	6 3 9	1 2 3	5 - 5
AE 148	SUICIDE	M 110 F 27 T 137	43 6 49	13 1 14	54 20 74	24 8 32	- - -	22 10 32	1 - 1	4 1 5	1 - 1	2 - 2	- - -	- 1 1
AE 149	HOMICIDE	M 23 F 14 T 37	11 3 14	2 - 2	10 11 21	6 6 12	- - -	1 4 5	1 - 1	- - -	1 - 1	1 1 2	- - -	- - -
AE 150	WAR INJURIES	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	TOTAL (AE138-AE150).....	M 762 F 267 T 1029	323 96 419	107 27 134	332 144 476	120 53 173	3 8 11	149 64 213	14 1 15	22 5 27	9 6 15	9 4 13	1 2 3	5 1 6
NXVII. NATURE OF INJURY.														
AN 138	FRACTURE OF SKULL	M 138 F 29 T 167	65 14 79	21 4 25	52 11 63	19 4 23	1 - 1	22 7 29	6 - 6	2 - 2	- - -	- - -	- - -	2 - 2
AN 139	FRACTURE OF SPINE AND TRUNK	M 35 F 17 T 52	15 5 20	7 4 11	13 8 21	4 3 7	- 3 3	8 2 10	- - -	1 - 1	- - -	- - -	- - -	- - -
AN 140	FRACTURE OF LIMBS	M 46 F 55 T 101	12 13 25	10 8 18	24 34 58	12 12 24	2 5 7	6 13 19	- - -	1 2 3	2 1 3	- 1 1	1 1 1	- - -
AN 141	DISLOCATION WITHOUT FRACTURE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 142	SPRAINS AND STRAINS	M 1 F - T 1	- - -	1 - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 143	OTHER HEAD INJURY	M 127 F 27 T 154	54 9 63	20 1 21	53 17 70	23 8 31	- - -	23 6 29	1 - 1	2 1 3	3 2 5	1 - 1	- - -	- - -
AN 144	INTERNAL INJURY	M 187 F 46 T 233	89 16 105	24 5 29	74 25 99	23 10 33	- - -	34 11 45	5 - 5	6 1 7	- 1 1	4 1 5	- 1 1	2 - 2
AN 145	OPEN WOUNDS	M 14 F 3 T 17	3 1 4	2 - 2	9 2 11	2 1 3	- - -	5 1 6	- - -	1 - 1	1 - 1	- - -	- - -	- - -
AN 146	SUPERFICIAL INJURY OR CONTUSION	M - F 2 T 2	- - -	- - -	- 2 2	- 2 2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 147	FOREIGN BODY THROUGH ORIFICE	M 16 F 4 T 20	7 2 9	- 1 1	9 1 10	1 - 1	- - -	7 - 7	- - -	- - -	- 1 1	1 - 1	- - -	- - -
AN 148	BURNS	M 35 F 17 T 52	14 12 26	5 - 5	16 5 21	2 1 3	- - -	11 3 14	1 - 1	- - -	1 1 2	- - -	- - -	1 - 1
AN 149	POISONINGS	M 72 F 33 T 105	20 11 28	9 2 11	43 23 66	18 6 24	- - -	16 14 30	1 - 1	4 - 4	1 - 1	3 1 4	- 1 1	- 1 1
AN 150	OTHER	M 91 F 34 T 125	44 16 60	8 2 10	39 16 55	16 6 22	- - -	17 7 24	- 1 1	5 1 6	1 - 1	- 1 1	- - -	- - -
	TOTAL (AN138-AN150).....	M 762 F 267 T 1029	323 96 419	107 27 134	332 144 476	120 53 173	3 8 11	149 64 213	14 1 15	22 5 27	9 6 15	9 4 13	1 2 3	5 1 6
	ALL CAUSES.	M 5895 F 3628 T 9523	1886 936 2822	815 542 1357	3194 2150 5344	1247 870 2117	106 79 185	1293 829 2122	65 26 91	201 123 324	133 121 254	95 62 157	26 22 48	28 18 46

TABLE 6

LIT. NO.	A	CAUSE OF DEATH INTERMEDIATE LIST, A (SEVENTH REVISION)	TOTAL	AGE		AGE																						
				-7 DAYS	28 DAYS	TOTAL -1	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85	N.S.
A 39 HYDATID DISEASE	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
A 40 FILARIASIS	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
A 41 ANKYLOSTOMIASIS	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
A 42 OTHER DISEASES DUE TO HELMINTHS	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	T	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
A 43 OTHER	M	2	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
	F	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	T	7	—	1	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2	—	—	—	—	—	—	—
TOTAL (A1-A43)	M	42	—	5	5	1	1	—	1	—	—	—	1	—	1	—	3	—	2	4	3	6	7	5	4	—	—	—
	F	29	—	1	2	3	1	1	3	—	—	2	2	—	1	1	3	1	1	1	4	—	1	—	—	2	—	—
	T	71	—	1	7	8	2	2	3	—	—	3	2	—	2	1	2	3	4	1	3	5	7	4	8	5	6	—
II. NEOPLASMS.																												
MALIGNANT NEOPLASMS (A44-A59).																												
A 44 BUCCAL CAVITY AND PHARYNX	M	21	—	—	—	—	—																					

TABLE 6

LNO.	CAUSE OF DEATH INTERMEDIATE LIST B (SEVENTH REVISION)	TOTAL	AGE										AGE										N.S.																																																																																																																																																																																																																			
			7-12 DAYS	13-17 DAYS	18-24 DAYS	25-34 DAYS	35-44 DAYS	45-54 DAYS	55-64 DAYS	65-74 DAYS	75-84 DAYS	85-94 DAYS	95-104 DAYS	105-114 DAYS	115-124 DAYS	125-134 DAYS	135-144 DAYS	145-154 DAYS	155-164 DAYS	165-174 DAYS	175-184 DAYS	185-194 DAYS		195-204 DAYS	205-214 DAYS	215-224 DAYS	225-234 DAYS	235-244 DAYS	245-254 DAYS	255-264 DAYS	265-274 DAYS	275-284 DAYS	285-294 DAYS	295-304 DAYS	305-314 DAYS	315-324 DAYS	325-334 DAYS	335-344 DAYS	345-354 DAYS	355-364 DAYS	365-374 DAYS	375-384 DAYS	385-394 DAYS	395-404 DAYS	405-414 DAYS	415-424 DAYS	425-434 DAYS	435-444 DAYS	445-454 DAYS	455-464 DAYS	465-474 DAYS	475-484 DAYS	485-494 DAYS	495-504 DAYS	505-514 DAYS	515-524 DAYS	525-534 DAYS	535-544 DAYS	545-554 DAYS	555-564 DAYS	565-574 DAYS	575-584 DAYS	585-594 DAYS	595-604 DAYS	605-614 DAYS	615-624 DAYS	625-634 DAYS	635-644 DAYS	645-654 DAYS	655-664 DAYS	665-674 DAYS	675-684 DAYS	685-694 DAYS	695-704 DAYS	705-714 DAYS	715-724 DAYS	725-734 DAYS	735-744 DAYS	745-754 DAYS	755-764 DAYS	765-774 DAYS	775-784 DAYS	785-794 DAYS	795-804 DAYS	805-814 DAYS	815-824 DAYS	825-834 DAYS	835-844 DAYS	845-854 DAYS	855-864 DAYS	865-874 DAYS	875-884 DAYS	885-894 DAYS	895-904 DAYS	905-914 DAYS	915-924 DAYS	925-934 DAYS	935-944 DAYS	945-954 DAYS	955-964 DAYS	965-974 DAYS	975-984 DAYS	985-994 DAYS	1000-1004 DAYS	1005-1009 DAYS	1010-1014 DAYS	1015-1019 DAYS	1020-1024 DAYS	1025-1029 DAYS	1030-1034 DAYS	1035-1039 DAYS	1040-1044 DAYS	1045-1049 DAYS	1050-1054 DAYS	1055-1059 DAYS	1060-1064 DAYS	1065-1069 DAYS	1070-1074 DAYS	1075-1079 DAYS	1080-1084 DAYS	1085-1089 DAYS	1090-1094 DAYS	1095-1099 DAYS	1100-1104 DAYS	1105-1109 DAYS	1110-1114 DAYS	1115-1119 DAYS	1120-1124 DAYS	1125-1129 DAYS	1130-1134 DAYS	1135-1139 DAYS	1140-1144 DAYS	1145-1149 DAYS	1150-1154 DAYS	1155-1159 DAYS	1160-1164 DAYS	1165-1169 DAYS	1170-1174 DAYS	1175-1179 DAYS	1180-1184 DAYS	1185-1189 DAYS	1190-1194 DAYS	1195-1199 DAYS	1200-1204 DAYS	1205-1209 DAYS	1210-1214 DAYS	1215-1219 DAYS	1220-1224 DAYS	1225-1229 DAYS	1230-1234 DAYS	1235-1239 DAYS	1240-1244 DAYS	1245-1249 DAYS	1250-1254 DAYS	1255-1259 DAYS	1260-1264 DAYS	1265-1269 DAYS	1270-1274 DAYS	1275-1279 DAYS	1280-1284 DAYS	1285-1289 DAYS	1290-1294 DAYS	1295-1299 DAYS	1300-1304 DAYS	1305-1309 DAYS	1310-1314 DAYS	1315-1319 DAYS	1320-1324 DAYS	1325-1329 DAYS	1330-1334 DAYS	1335-1339 DAYS	1340-1344 DAYS	1345-1349 DAYS	1350-1354 DAYS	1355-1359 DAYS	1360-1364 DAYS	1365-1369 DAYS	1370-1374 DAYS	1375-1379 DAYS	1380-1384 DAYS	1385-1389 DAYS	1390-1394 DAYS	1395-1399 DAYS	1400-1404 DAYS	1405-1409 DAYS	1410-1414 DAYS	1415-1419 DAYS	1420-1424 DAYS	1425-1429 DAYS	1430-1434 DAYS	1435-1439 DAYS	1440-1444 DAYS	1445-1449 DAYS	1450-1454 DAYS	1455-1459 DAYS	1460-1464 DAYS	1465-1469 DAYS	1470-1474 DAYS	1475-1479 DAYS	1480-1484 DAYS	1485-1489 DAYS	1490-1494 DAYS	1495-1499 DAYS	1500-1504 DAYS	1505-1509 DAYS	1510-1514 DAYS	1515-1519 DAYS	1520-1524 DAYS	1525-1529 DAYS	1530-1534 DAYS	1535-1539 DAYS	1540-1544 DAYS	1545-1549 DAYS	1550-1554 DAYS	1555-1559 DAYS	1560-1564 DAYS	1565-1569 DAYS	1570-1574 DAYS	1575-1579 DAYS	1580-1584 DAYS	1585-1589 DAYS	1590-1594 DAYS	1595-1599 DAYS	1600-1604 DAYS	1605-1609 DAYS	1610-1614 DAYS	1615-1619 DAYS	1620-1624 DAYS	1625-1629 DAYS	1630-1634 DAYS	1635-1639 DAYS	1640-1644 DAYS	1645-1649 DAYS	1650-1654 DAYS

DIVISION OF VITAL STATISTICS

TABLE 6
DEATHS BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	AGE			AGE																							W.S.
			7-17 DAYS	18-24 DAYS	25-44 TOTAL	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85			
A 135	ILL-DEFINED	127	104	3	20	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	XVI. SYMPTOMS, SENSIBILITY AND ILL-DEFINED CONDITIONS	101	88	3	10	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		228	192	6	30	228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H 136	SENILITY WITHOUT PSYCHOSES	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
H 137	ILL-DEFINED AND UNKNOWN	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		72	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		236	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A136, A137)	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		277	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	XVII. ACCIDENTS, POISONINGS AND VIOLENCE																												
	XVIII. EXTERNAL CAUSE																												
AE 138	MOTOR VEHICLE ACCIDENTS																												
A	TRAFFIC (810-825)	317	-	-	1	1	1	-	2	1	10	11	47	70	25	21	17	20	18	17	6	14	7	6	4	2	-	-	
		102	-	-	8	2	-	-	1	3	2	4	3	14	8	4	6	5	9	7	3	9	-	2	3	1	-	-	
		619	-	-	3	3	1	1	5	3	14	14	61	78	29	27	22	26	29	25	24	9	23	7	8	3	-	-	
B	NON-TRAFFIC	11	-	-	-	-	2	1	-	-	1	2	-	-	2	1	-	-	1	-	-	-	-	-	1	1	-	-	
		14	-	-	-	-	1	1	-	-	1	2	-	-	2	1	-	-	1	-	-	-	-	-	1	1	-	-	
		328	-	-	1	1	1	2	1	11	12	49	70	25	23	18	17	20	19	17	6	14	7	7	5	2	-	-	
		105	-	-	2	2	1	1	3	4	14	9	4	14	9	4	7	3	8	7	3	8	2	2	3	1	-	-	
		433	-	-	3	3	2	2	5	4	15	16	63	78	29	29	23	26	29	26	24	9	23	7	9	8	-	-	
AE 139	OTHER TRANSPORT ACCIDENTS																												
A	DROWNING INVOLVING SMALL BOATS (850)	3	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
		2	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-	
		5	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-	
B	DROWNING INVOLVING OTHER WATERCRAFT (851)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
C	OTHER TRANSPORT	24	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		25	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-	-	1	1	-	-	-	-	-	-	1	-	3	6	1	6	-	-	1	2	1	1	-	-	-	-	
		30	-																										

TABLE 7
DEATHS BY CAUSE AND SEX, BY AGE, EDMONTON, 1967

NO.	CAUSE OF DEATH INTERMEDIATE LIST B (SEVENTH REVISION)	TOTAL	AGE			AGE																			N.S.
			7-14	15-24	25-44	45-64	65-74	75-84	85-94	95-104	105-114	115-124	125-134	135-144	145-154	155-164	165-174	175-184	185-194	195-204					
I. INFECTIVE AND PARASITIC DISEASES.																									
TUBERCULOSIS (A1-A5).																									
A 1 RESPIRATORY.																									
A ACTIVE																									
B INACTIVE (002-2, 008-2) ..																									
TOTAL (A1).																									
A 2 MENINGES AND CENTRAL NERVOUS SYSTEM																									
A 3 INTESTINE, PERITONEUM AND MESENTERY																									
A 4 BONE AND JOINT																									
A 5 OTHER FORMS																									
TOTAL (A1-A5).																									
SYPHILIS (A6-A10).																									
A 6 CONGENITAL																									
A 7 EARLY																									
A 8 TABES DORSALIS																									
A 9 GENERAL PARESIS																									
A 10 OTHERS																									
TOTAL (A6-A10).																									
A 11 GONOCOCCAL INFECTION																									
A 12 TYPHOID																									
A 13 PARATYPHOID AND OTHER SALMONELLA																									
A 14 CHOLERA																									
A 15 BRUCELLOSIS																									
A 16 DYSENTERY																									
A 17 SCARLET FEVER																									
A 18 STREPTOCOCCAL SORE THROAT ..																									
A 19 ERYSIPELAS																									
A 20 SEPTICAEMIA AND PYAEMIA ...																									
A 21 DIPHTHERIA																									
A 22 WHOOPING COUGH																									
A 23 MENINGOCOCCAL INFECTIONS ..																									
A 24 PLAGUE																									
A 25 LEPROSY																									
A 26 TETANUS																									
A 27 ANTHRAX																									
A 28 ACUTE POLIOMYELITIS																									
A 29 ACUTE ENCEPHALITIS																									
A 30 LATE EFFECTS OF POLIO- MYELITIS AND ENCEPHALITIS ..																									
A 31 SMALLPOX																									
A 32 MEASLES																									
A 33 YELLOW FEVER																									
A 34 INFECTIOUS HEPATITIS																									
A 35 RABIES																									
A 36 TYPHUS AND OTHER RICKET- TIAL DISEASES																									
A 37 MALARIA																									
A 38 SCHISTOSOMIASIS																									

DIVISION OF VITAL STATISTICS

TABLE 7
DEATHS BY CAUSE AND SEX, BY AGE, EDMONTON, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST II (SEVENTH REVISION)	TOTAL	-7 DAYS	7-27 DAYS	28 DAYS	TOTAL -1	AGE																	85	N.S.			
							1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69			70-74	75-79	80-84
H 39	HYDATID DISEASE	M P T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 40	FILARIASIS	M P T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 41	ANKYLOSTOMIASIS	M P T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 42	OTHER DISEASES TO HELMINTHS	M P T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 43	.....	M P T	1 1 2	- - -	- - -	1 1 1	1 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
..... (A1-A43)	M P T	17 17 17	- - -	- - -	- - -	1 1 1	1 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
II. NEOPLASMS.																												
MALIGNANT NEOPLASMS (A44-A59) ..																												
A 44	BUCCAL CAVITY PHARYNX	M P T	10 9 13	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 45	ESOPHAGUS	M P T	6 3 9	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 46	STOMACH	M P T	28 8 36	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 47	INTESTINE, EXCEPT RECTUM ..	M P T	19 25 44	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 48	RECTUM	M P T	16 7 23	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 49	LARYNX	M P T	1 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 50	TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY ..	M P T	53 8 61	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 51	BREAST	M P T	35 35 35	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 52	CERVIX UTERI	M P T	8 5 13	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 53	UTERUS, OTHER PARTS	M P T	5 5 5	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
H 54	PROSTATE	M P T	23 4 4	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 56	BONE AND CONNECTIVE TISSUE ..	M P T	2 2 4	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	-				

TABLE 7

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST II (SEVENTH REVISION)	TOTAL	AGE								AGE																		
			DAYS	DAYS	DAYS	TOTAL -1																							
							1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85	N.S.	
A 68	PSYCHONEUROTIC AND PERSONALITY DISORDERS	M	6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--		
F			8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	
T			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
A 69	MENTAL DEFICIENCY	M	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
F			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
T			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	TOTAL (A67-A69)	M	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
F			2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
T			8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																													
A 70	CEREBROVASCULAR LESIONS ...	M	89	--	--	--	--	--	--	--	--	--	--	--	2	--	1	--	3	8	8	10	7	17	21	16	--		
F			94	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--	5	2	11	8	11	15	24	15	--		
T			183	--	--	--	--	--	--	--	--	--	--	--	3	--	2	--	8	8	19	18	32	45	31	--	--		
A 71	NON-MENINGOCOCCAL MENINGITIS	M	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--		
F			1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
T			2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
A 72	MULTIPLE SCLEROSIS	M	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--		
F			4	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--	1	--	--	--	--	--	--	--	--		
T			5	--	--	--	--	--	--	--	--	--	--	--	2	--	2	--	2	--	--	--	--	--	--	--	--		
A 73	EPILEPSY	M	3	--	--	--	--	--	--	--	1	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--		
F			2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
T			5	--	--	--	--	--	--	--	1	--	--	--	2	--	--	--	--	--	--	--	--	--	--	--	--		
A 74	INFLAMMATORY DISEASES OF THE EYE	M	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
F			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
T			--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--		
A 75	CATARACT	M</																											

DIVISION OF VITAL STATISTICS

TABLE 7
DEATHS BY CAUSE AND SEX, BY AGE, EDMONTON, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST II (SEVENTH REVISION)	TOTAL	AGE																			N.S.					
			-7 DAYS	7-27 DAYS	28 DAYS	TOTAL -1	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59		60-64	65-69	70-74	75-79	80-84	85
X. DISEASES OF THE GENITO-URINARY SYSTEM.																											
# 101	GASTRITIS OR DUODENITIS ..	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
# 102	APPENDICITIS	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
# 103	INTESTINAL OBSTRUCTION AND HERNIA	M	4	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	1	-	-	-
	F	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-
	T	8	2	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	2	-	-	-
A 104	GASTRO-ENTERITIS AND COLITIS	M	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-
	F	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
# 105	CIRRHOSIS OF LIVER	M	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	3	2	2	-	-	1	-
	F	12	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	2	1	3	1	-	-	-	-	-
	T	22	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	3	2	6	3	2	-	-	-	-
# 106	CHOLELITHIASIS AND CHOLECY- STITIS	M	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-
	F	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 107	OTHER	M	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	1	-	-
	F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	1	1	-	-
	T	35	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	2	6	3	4	3	7	4	8
	F	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	2	4	1	8	2	5	-	8
	T	68	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	6	4	10	4	12	9	12	4	16
XI. COMPLICATIONS OF PREGNANCY, CHILDBIRTH, OR PUERPERIUM.																											
# 108	ACUTE NEPHRITIS	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
# 109	CHRONIC AND OTHER NEPHRITIS	M	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-
	F	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
# 110	INFECTIONS OF KIDNEY	M	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-
	F	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
# 111	CALCULI	M	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-
	F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
# 112	HYPERPLASIA OF PROSTATE ...	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
A 113	BREAST	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 114	OTHER	M	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-
	F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-
	T	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM.																											
# 121	SKIN INFECTIONS	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 122	ARTHRITIS AND SPONDYLITIS	M	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 123	RHEUMATISM	M	-	-	-	-	-	-	-	-	-	-	-	-	-												

TABLE 7
DEATHS BY CAUSE AND SEX, BY AGE, EDMONTON, 1967

NO.	CAUSE OF DEATH INTERMEDIATE LIST B (SEVENTH REVISION)	TOTAL	AGE																						AGE																
			-7 DAYS	DAYS	TOTAL -1	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 N.S.															
A 135 ILL-DEFINED	H	18	17	--	1	18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	21	19	2	--	21	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	39	36	2	1	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
TOTAL (A130-A135)	H	43	41	1	1	43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	39	36	2	1	39	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	82	77	3	2	82	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.																																									
A 136 SENILITY WITHOUT PSYCHOSIS	H	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2	7															
	F	9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	2															
	T	19	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	3	4															
A 137 ILL-DEFINED AND UNKNOWN	H	5	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	2	1	1	--	--	--															
	F	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	1	--	--	--															
	T	7	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	3	2	2	--	--	--															
TOTAL (A136, A137)	H	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	4	2	3	--	--	--															
	F	11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2	--	--	--	--	2	--	--	--															
	T	26	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	--	--	6	3	5	--	--	--															
XVII. ACCIDENTS, POISONINGS AND VIOLENCE.																																									
EXVII. EXTERNAL CAUSE.																																									
AE 138 MOTOR VEHICLE ACCIDENTS.																																									
A TRAFFIC (B10-B25)	H	60	--	--	--	--	--	--	--	1	1	2	3	18	8	7	6	2	4	4	2	--	1	2	--	1															
	F	24	--	--	--	--	--	--	--	1	--	--	8	3	1	1	3	3	4	--	1	1	--	--	2																
	T	84	--	--	--	--	--	--	--	2	1	2	9	20	7	8	7	5	8	4	3	1	4	2	--	3															
B NON-TRAFFIC	H	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
TOTAL (AE138)	H	62	--	--	--	--	--	--	--	1	1	2	3	18	8	9	6	2	4	4	1	--	1	2	--	1															
	F	25	--	--	--	--	--	--	--	1	--	6	2	1	1	8	8	2	4	3	1	--	1	--	--	2															
	T	87	--	--	--	--	--	--	--	2	1	3	8	20	7	10	7	5	6	6	3	1	4	2	--	3															
AE 139 OTHER TRANSPORT ACCIDENTS.																																									
A DROWNINGS INVOLVING SMALL BOATS (B50)	H	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
B DROWNINGS INVOLVING OTHER WATERCRAFT (B51)	H	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
C OTHER TRANSPORT	H	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
TOTAL (AE139)	H	2	--	--	--	--	--	--	--	--	--	--	--	1	--	--	1	--	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--															
AE 140 ACCIDENTAL POISONING	H	8	--	--	--	--	--	--	--	--	--	--	--	1	1	2	--	3	--	2	--	--	--	--	--	--															
	F	5	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--															
	T	13	--	--	--	--	--	--	--	--	--	--	--	--	2	2	--	--	--	--	--	--	--	--	--	--															
AE 141 ACCIDENTAL FALLS	H	21	--	--	--	--	--	--	--	1	--	--	--	2	1	--	--	3	3	1	4	1	1	2	2	--															
	F	13	--	--	1	1	--	--	--	--	1	--	--	--	--	--	--	1	1	--	--	--	--	5	4	--															
	T	34	--	--	1	2	--	--	--	--	1	--	--	--	2	1	--	4	4	2	4	1	1	7	6	--															
AE 142 ACCIDENT CAUSED BY MACHINERY	H	5	--	--	--	--	--	--	--	--	1	--	--	1	1	--	--	1	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--															
	T	5	--	--	--	--	--	--	--	--	--	--	--	--	2	2	--	--	--	--	--	--	--	--	--	--															
AE 143 ACCIDENT CAUSED BY FIRE AND EXPLOSION	H	9	--	--	--	--	--	--	--	2	--	--	--	1	--	2	--	1	--	1	--	2	--	--	--	--															
	F	1	--	--	--	--	--	--	--	2	--	--	--	1	--	3	1	--	1	--	2	--	--	--	--	--															
	T	10	--	--	--	--	--	--	--	--	--	--	--	--	--	3	1	--	2	--	3	--	--	--	--	--															
AE 144 OTHER ACCIDENTAL BURNS	H	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--															
	F	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--															
	T	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
AE 145 ACCIDENT CAUSED BY FIREARM	H	2	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
AE 146 ACCIDENTAL DROWNING	H	1	--	--	--	--	--	--	--	--	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--															
	F	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--	--	--															
	T	2	--	--	--	--	--	--	--	--	1	2	--	--	--	1	--	--	--	--	--	--	--	--	--	--															
AE 147 ALL OTHER ACCIDENTAL CAUSES	H	13	--	--	3	3	--	--	--	2	2	1	8	--	1	--	1	--	--	--	1	--	1	--	--	--															
	F	7	--	--	1	1	--	--	--	--	--	--	1	--	2	--	1	--	--	--	1	--	--	--	--	--															
	T	15	--	--	4	4	--	--	--	2	2	1	2	--	--	--	1	--	--	--	2	--	--	--	--	--															
TOTAL (AE138-AE147)	H	126	--	--	3	3	--	--	--	1	6	5	8	19	7	16	10	9	5	9	7	4	5	6	1	2															
	F	50	--	--	2	2	--	--	--	--	4	3	7	4	1	8	6	3	--	2	2	3	--	--	7	5															
	T	176	--	--	5	5	1	--	--	2	6	7	15	23	8	17	13	15	8	8	9	8	6	1	9	8															
AE 148 SUICIDE	H	27	--	--	--	--	--	--	--	--	--	--	4	--	--	3	5	--	1	3	8	1	--	--	1																
	F	10	--	--	--	--	--	--	--	--	--	--	--	--	--	1	2	--	2	--	--	--	--	--	--	--															
	T	37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	6	--	3	8	8	1	--	--	--	--															
AE 149 HOMICIDE	H	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--	--															
	F	4	--	--	--	--	--	--	--	1	1	1	--	--	2	--	--	--	--	--	--	--	--	--	--	--															
	T	5	--	--	--	--	--	--	--	--	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
AE 150 WAR INJURIES	H	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
TOTAL (AE138-AE150)	H	149	--	--	3	3	--	--	--	1	6	5	8	23	7	17	13	14	7	10	10	8	6	1	2	4															
	F	49	--	--	2	2	1	--	--	1	3	3	8	7	2	4	8	6	8	8	2	3	--	--	7	5															
	T	213	--	--	5	5	1	--	--	2	7	8	16	28	9	19	17	22	13	12	12	8	6	1	9	--															
NEVII. NATURE OF INJURY.																																									
AN 138 FRACTURE OF SKULL	H	22	--	--	--	--	--	--	--	2	1	3	5	2	1	2	1	--	2	2	--	2	--	--	1	--															
	F	7	--	--	--	--	--	--	--	--	1	4	7	2	1	2	1	--	2	--	2	--	--	--	--	--															
	T	29	--	--	--	--	--	--	--	--	2	5	12	3	2	3	2	--	4	--	4	--	--	--	--	--															
AN 139 FRACTURE OF SPINE AND TRUNK	H	--	--	--	--	--	--	--	--	--	--	--	1	3	--	2	--	--	1	--	--	--	--	--	--	--															
	F	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--															
	T	2	--	--</																																					

DEATHS BY CAUSE AND SEX, BY AGE, CALGARY, 1967

[illegible]

TABLE 8

TABLE 8

TABLE 8
DEATHS BY CAUSE AND SEX, BY AGE, CALGARY, 1967

LIST # NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	AGE													AGE													N.C.S.
			-7	7-27	28	TOTAL	-1	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85	
A 135	ILL-DEFINED	M	47	36	1	10	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	31	23	1	7	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	78	59	2	17	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A130-A135)	M	61	50	1	10	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	66	37	1	8	66	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	107	87	2	18	107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RVII. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.																													
A 136	SENILITY WITHOUT PSYCHOSIS	M	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	
		F	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	
		T	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	
A 137	ILL-DEFINED AND UNKNOWN	M	131	-	-	-	-	-	-	-	-	-	-	-	1	1	7	4	7	21	16	24	13	15	10	12	-	-	
		F	95	-	-	-	-	-	-	-	-	-	-	1	2	1	2	9	5	10	27	16	31	17	24	13	26	-	
		T	186	-	-	-	-	-	-	-	-	-	-	2	3	2	9	13	16	31	43	51	32	34	27	39	26	-	
	TOTAL (B136, B137)	M	133	-	-	-	-	-	-	-	-	-	-	2	3	8	11	13	21	16	24	13	15	10	14	-	-	-	
		F	98	-	-	-	-	-	-	-	-	-	-	3	4	5	11	16	21	31	47	38	24	31	27	39	26	-	
		T	191	-	-	-	-	-	-	-	-	-	-	5	7	13	22	27	37	47	62	52	39	45	41	55	41	-	
RVIII. ACCIDENTS, POISONINGS AND VIOLENCE.																													
RXVII. EXTERNAL CAUSE.																													
AE 138 MOTOR VEHICLE ACCIDENTS.																													
B	TRAFFIC (B10-B25)	M	32	-	-	-	-	-	-	3	-	2	6	5	2	3	2	2	2	1	-	3	1	-	-	-	-	-	
		F	17	-	-	-	-	-	-	2	-	1	4	1	2	2	1	1	1	2	3	-	3	1	1	1	-	-	
		T	49	-	-	-	-	-	-	5	-	3	10	6	4	4	3	3	3	4	4	-	6	2	2	2	-	-	
B	NON-TRAFFIC	M	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (AE138)	M	34	-	-	-	-	-	-	3	-	3	6	5	2	3	2	2	3	1	-	3	1	-	-	-	-	-	
		F	17	-	-	-	-	-	-	2	-	1	2																

TABLE 9
DEATHS BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	UNDER 15	SINGLE							MARRIED							WIDOWED AND DIVORCED							NOT STATED						
				TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.							
I. INFECTIVE AND PARASITIC DISEASES.																															
TUBERCULOSIS (A1-A5).																															
A 1	RESPIRATORY.																														
A	ACTIVE	M	27	1	5	-	-	2	-	3	-	10	-	7	4	6	2	-	5	-	-	-	1	4	-	1					
		F	6	-	1	-	1	2	-	-	-	2	-	1	1	4	-	-	-	-	-	-	-	-	-	-					
		T	28	1	6	-	1	2	-	3	-	12	-	8	5	6	2	-	5	-	-	-	1	4	-	1					
B	INACTIVE (002.2, 004.2) ..	M	1	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
		F	2	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-					
		T	3	-	-	-	-	-	-	-	-	2	-	-	-	-	2	-	-	-	-	-	-	-	-	-					
	TOTAL (A1)	M	23	1	5	-	-	2	-	3	-	11	-	7	4	6	2	-	5	-	-	-	1	4	-	1					
		F	8	-	1	-	1	2	-	-	-	2	-	1	1	4	-	-	-	-	-	-	-	-	-	-					
		T	31	1	6	-	1	2	-	3	-	13	-	8	5	6	2	-	5	-	-	-	1	4	-	1					
A 2	MEINGES AND CENTRAL NERVOUS SYSTEM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 3	INTESTINE, PERITONEUM AND MESENTERY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 4	BONE AND JOINT	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 5	OTHER FORMS	M	1	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-					
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	2	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-					
	TOTAL (A1-A5)	M	24	1	5	-	-	2	-	3	-	12	-	8	5	6	2	-	5	-	-	-	1	4	-	1					
		F	9	-	1	-	1	2	-	-	-	2	-	1	1	4	-	-	-	-	-	-	-	-	-	-					
		T	33	1	6	-	1	2	-	3	-	14	-	9	6	7	2	-	5	-	-	-	1	4	-	1					
SYPHILIS (A6-A10).																															
B 6	CONGENITAL	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 7	EMERY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 8	FABES ORISALIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 9	GENERAL PARESIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 10	OTHERS	M	6	-	-	-	-	-	-	-	5	-	-	1	1	3	-	1	-	-	-	1	-	-	-	-					
		F	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	6	-	-	-	-	-	-	-	5	-	-	1	1	3	-	1	-	-	-	1	-	-	-	-					
	TOTAL (A6-A10)	M	6	-	-	-	-	-	-	-	5	-	-	1	1	3	-	1	-	-	-	1	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	6	-	-	-	-	-	-	-	5	-	-	1	1	3	-	1	-	-	-	1	-	-	-	-					
A 11	GONOCOCCAL INFECTION	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 12	TYPHOID	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 13	PARATYPHOID AND OTHER SALMONELLA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 14	CHOLERA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 15	BRUCELOSIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 16	DYSENTERY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 17	SCARLET FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 18	STREPTOCOCCAL SORE THROAT ..	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 19	ERYSIPELAS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 20	SEPTICAEMIA AND PYAEMIA ...	M	2	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		F	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
		T	4	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
A 21	DIPHTHERIA	M	-	-	-	-	-																								

DIVISION OF VITAL STATISTICS

TABLE 9

DEATHS BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, ALBERTA, 1967

			R DA										PROV OR										NOT									
LIST NO.	A	CAUSE OF DEATH (INTERMEDIATE LIST - 15 MONTH REVISION)	TOTAL	UNDER 15					SINGLE					MARRIED					WIDOWED AND DIVORCED					NOT STATED								
				TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75		N.S.							
A 39	HYDATIC DISEASE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
B 40	FILARIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
A 41	ANKYLOSTOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
A 42	OTHER DISEASES DUE TO HELMINTHS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
A 43	OTHER	M	2	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	8	2	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	7	3	1	-	-	-	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TOTAL (A1-A43)		M	42	9	8	-	1	2	-	5	-	18	-	-	7	5	-	-	-	-	-	-	-	-	2	4	-	2				
		F	29	12	2	-	1	1	-	7	-	22	-	-	7	2	1	-	-	-	-	-	-	1	3	3	-	1				
		T	71	20	10	-	2	3	-	12	-	40	-	-	14	7	1	-	-	-	-	-	-	3	7	7	-	3				
II. NEOPLASMS.																																
MALIGNANT NEOPLASMS (A44-A59)																																
A 44	BUCCAL CAVITY AND PHARYNX	M	21	1	2	-	-	-	-	2	-	17	-	1	8	2	6	-	1	-	-	-	-	-	-	-	-	-				
		F	7	-	1	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	28	1	3	-	-	-	-	2	-	22	-	-	8	2	6	-	1	-	-	-	-	-	-	-	-	-				
A 45	ESOPHAGUS	M	22	-	4	-	-	-	1	-	3	-	12	-	-	3	3	6	-	6	-	-	-	-	-	-	-	-				
		F	8	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	30	-	4	-	-	-	1	-	3	-	14	-	-	3	3	6	-	6	-	-	-	-	-	-	-	-				
A 46	STOMACH	M	115	-	23	-	2	6	8	7	-	73	-	4	23	24	22	-	19	-	-	-	-	-	-	-	-	-				
		F	55	-	2	-	1	1	1	-	24	-	6	12	5	3	-	29	-	-	-	-	-	-	-	-	-	-				
		T	170	-	25	-	3	7	8	-	97	-	10	35	29	25	-	48	-	-	-	-	-	-	-	-	-	-				
A 47	INTESTINE, EXCEPT RECTUM	M	94	-	11	-	1	3	3	4	-	62	-	2	25	15	20	-	20	-	-	-	-	-	-	-	-	-				
		F	96	-	3	-	-	8	-	1	-	47	-	2	23	12	10	-	19	-	-	-	-	-	-	-	-	-				
		T	190	-	14	-	1	5	3	5	-	109	-	4	48	27	30	-	39	-	-	-	-	-	-	-	-	-				
A 48	RECTUM	M	51	-	10	1	8	-	3	4	-	37	-	2	10	12	13	-	4	-	-	-	-	-	-	-	-	-				
		F	31	-	2	-	-	-	-	-	18	-	2	8	5	3	-	11	-	-	-	-	-	-	-	-	-	-				
		T	82	-	12	1	8	-	3	5	-	55	-	4	18	17	16	-	15	-	-	-	-	-	-	-	-	-				
A 49	LARYNX	M	15	-	3	-	-	-	-	-	12	-	-	5	1	6	-	-	-	-	-	-	-	-	-	-	-	-				
		F	15	-	3	-	-	-	-	-	12	-	-	5	1	6	-	-	-	-	-	-	-	-	-	-	-	-				
		T	30	-	6	-	-	-	-	-	24	-	-	10	2	12	-	-	-	-	-	-	-	-	-	-	-	-				
A 50	TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY	M	209	-	26	-	8	10	6	-	152	-	7	72	44	29	-	32	-	-	-	-	-	-	-	-	-	-				
		F	62	-	2	-	2	1	1	-	48	-	12	18	2	4	-	12	-	-	-	-	-	-	-	-	-	-				
		T	271	-	28	-	9	11	6	-	200	-	19	90	46	33	-	44	-	-	-	-	-	-	-	-	-	-				
A 51	BREAST	M	1	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-				
		F	155	-	12	-	1	5	4	2	105	-	26	62	9	8	-	38	-	-	-	-	-	-	-	-	-	-				
		T	156	-	13	-	1	5	4	2	106	-	26	62	9	8	-	38	-	-	-	-	-	-	-	-	-	-				
A 52	CERVIX UTERI	F	31	-	1	-	1	-	-	-	21	-	7	13	1	-	-	9	-	-	-	-	-	-	-	-	-	-				
A 53	UTERUS, OTHER PARTS	F	18	-	1	-	-	-	1	-	9	-	1	3	1	6	-	8	-	-	-	-	-	-	-	-	-	-				
A 54	PROSTATE	M	99	-	14	-	-	1	8	11	-	61	-	-	11	23	27	-	24	-	-	-	-	-	-	-	-	-				
A 55	SKIN	M	14	-	8	-	1	1	1	-	8	-	1	6	1	-	-	3	-	-	-	-	-	-	-	-	-	-				
		F	6	-	1	-	-	-	-	-	4	-	1	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-				
		T	20	1	9	-	1	1	1	-	12	-	2	8	2	-	-	4	-	-	-	-	-	-	-	-	-	-				
A 56	SKIN AND CONNECTIVE TISSUE	M	10	-	2	2	-	-	-	-	8	-	1	2	5	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	10	-	1	1	1	5	1	-	6	-	1	2	5	1	1	-	4	-	-	-	-	-	-	-	-	-				
		T	20	2	3	3	-	-	-	-	14	-	2	7	5	-	-	1	-	-	-	-	-	-	-	-	-	-				
A 57	OTHER AND UNSPECIFIED SITES	M	96	-	11	-	-	3	5	3	-	65	-	3	16	29	17	-	20	-	-	-	-	-	-	-	-	-				
		F	70	-	4	-	1	1	1	1	-	40	-	1	14	10	15	-	36	-	-	-	-	-	-	-	-	-				
		T	166	-	15	-	2	4	6	4	-	105	-	4	30	39	32	-	56	-	-	-	-	-	-	-	-	-				
A 58	RESPIRATORY ORGANS (A44, A46, A49)	M	3	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	3	1	1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
III. IV. ALLERGIC, ENDOCRINE, METABOLIC AND BLOOD DISEASES.																																
A 61	NON-TOXIC GOITER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
A 62	THYROIDITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
A 63	DIABETES MELLITUS	M	90	-	18	1	1	3	8	5	-	47	1	2	12	13	19	-	24	-	-	-	-	-	-	-	-	-				
		F	89	-	3	-	-	1	1	1	-	55	-	1	18	15	10	-	41	-	-	-	-	-	-	-	-	-				
		T	179	-	21	1	2	4	9	8	-	102	1	2	24	31	34	-	65	-	-	-	-	-	-	-	-	-				
A 64	NUTRITIONAL DEFICIENCY STATES	M	3	-	3	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		F	3	-	3	-	-	2	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
		T	6	-	6	-	-																									

TABLE 9

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	SINGLE										MARRIED										WIDOWED AND DIVORCED										NOT STATED
			UNDER 15	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.									
A 68	PSYCHONEUROTIC AND PERSONALITY DISORDERS	20	-	10	-	2	7	-	1	-	6	-	1	3	1	-	4	-	1	2	-	1	-	-									
F		8	-	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-										
T		23	-	11	1	2	7	-	1	-	7	-	1	3	1	-	4	-	1	2	-	1	-										
A 69	MENTAL DEFICIENCY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
F		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
T		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-										
TOTAL (A67-A69)		24	-	13	-	2	8	-	3	-	6	-	1	3	1	-	5	-	1	2	-	2	-										
F		8	-	1	-	-	-	-	-	1	-	1	2	-	-	-	2	-	-	-	-	-	-										
T		30	-	14	1	2	8	-	3	-	9	-	2	5	1	-	7	-	1	4	-	2	-										
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																																	
A 70	CEREBROVASCULAR LESIONS	540	-	90	1	1	16	19	53	-	302	-	8	47	78	169	-	152	-	1	5	17	129	-									
F		470	3	19	-	5	8	5	8	159	1	3	40	61	103	280	-	234	-	10	61	234	-	8									
T		1,019	3	109	1	1	22	24	61	-	461	1	14	87	129	230	-	440	-	1	15	61	363	-									
A 71	NON-MENINGEAL MENINGITIS	3	1	-	-	-	-	-	-	2	-	-	-	-	3	-	-	-	-	-	-	-	-	-									
F		3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
T		3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
A 72	MULTIPLE SCLEROSIS	6	-	2	-	2	-	-	2	-	2	-	2	-	-	-	-	-	-	-	-	-	-	-									
F		10	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
T		14	-	4	-	4	-	-	3	-	3	-	4	-	-	-	-	-	-	-	-	-	-	-									
A 73	EPILEPSY	11	3	5	2	3	-	-	-	3	-	1	-	-	2	-	-	-	-	-	-	-	-	-									
F		8	3	2	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-									
T		19	6	7	4	3	-	-	-	4	-	-	-	-	2	-	-	-	-	-													

IX. DISEASES OF THE DIGESTIVE SYSTEM.

DISEASE SYSTEM.																
A 98 DISEASES OF THE TEETH	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 99 ULCER OF THE STOMACH	M	15	-	4	-	1	1	-	2	-	9	-	-	3	2	4
	F	9	-	-	-	-	-	-	6	-	-	-	-	1	2	3
	T	24	-	4	-	1	1	-	2	-	15	-	-	6	3	6
														5	-	5
A 100 ULCER OF THE DUODENUM	M	21	-	1	-	-	-	-	1	-	12	-	1	6	1	4
	F	11	-	1	1	-	-	-	1	-	4	-	1	1	3	2
	T	32	-	2	1	-	-	-	1	-	16	-	2	7	2	7
														11	-	11

TABLE 9
DEATHS BY CAUSE AND SEX, BY MARITAL STATUS AND AGE, ALBERTA, 1967

LIST NO.	A	CAUSE OF DEATH IMMEDIATE LIST A (SEVENTH REVISION)	TOTAL	UNDER 15							SINGLE							MARRIED							WIDOWED AND DIVORCED							NOT STATED
				15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.									
X. DISEASES OF THE GENITO- URINARY SYSTEM.																																
H 101 GASTRITIS AND DUODENITIS ..																																
F 1 - - - - -																																
T 1 - - - - -																																
H 102 APPENDICITIS																																
F 7 - - - - -																																
T 7 - - - - -																																
H 103 INTESTINAL OBSTRUCTION AND HERNIA																																
F 36 7 1 - - - - -																																
T 23 3 2 1 1 1 - - - - -																																
F 59 10 3 - - - - -																																
T 59 10 3 - - - - -																																
H 104 GASTRO-ENTERITIS AND COLITIS																																
F 20 7 3 - - - - -																																
T 36 15 - - - - -																																
F 56 22 3 - - - - -																																
T 56 22 3 - - - - -																																
H 105 CIRRHOSIS OF LIVER																																
F 48 - - - - -																																
T 29 1 1 - - - - -																																
F 12 1 1 1 5 1 - - - - -																																
T 29 1 1 1 5 1 - - - - -																																
H 106 CHOLELITHIASIS AND CHOLECY- STITIS																																
F 17 - - - - -																																
T 77 1 12 1 1 5 1 - - - - -																																
F 44 - - - - -																																
T 44 - - - - -																																
H 107 OTHER																																
F 43 1 0 1 - - - - -																																
T 20 1 1 - - - - -																																
F 63 2 9 1 - - - - -																																
T 63 2 9 1 - - - - -																																
TOTAL (A98-A107)																																
F 208 15 31 1 - 2 9 6 13 - - - - -																																
T 155 20 5 2 1 1 1 - - - - -																																
F 363 35 36 3 3 10 7 13 - - - - -																																
T 363 35 36 3 3 10 7 13 - - - - -																																
X. DISEASES OF THE GENITO- URINARY SYSTEM.																																
A 108 ACUTE NEPHRITIS																																
F 2 - - - - -																																
T 2 - - - - -																																
A 109 CHRONIC AND OTHER NEPHRITIS ..																																
F 30 - - - - -																																
T 50 - - - - -																																
F 20 - - - - -																																
T 20 - - - - -																																
A 110 INFECTIONS OF KIDNEY																																
F 22 - - - - -																																
T 19 - - - - -																																
F 41 - - - - -																																
T 41 - - - - -																																
A 111 CALCULI																																
F 2 - - - - -																																
T 6 - - - - -																																
A 112 HYPERTROPHY OF PROSTATE ...																																
F 27 - - - - -																																
T 27 - - - - -																																
A 113 BREAST																																
F - - - - -																																
T - - - - -																																
A 114 OTHER																																
F 6 - - - - -																																
T 11 - - - - -																																
F 17 - - - - -																																
T 17 - - - - -																																
TOTAL (A108-A114)																																
F 89 - - - - -																																
T 143 - - - - -																																
F 23 3 3 2 4 11 - - - - -																																
T 23 3 3 2 4 11 - - - - -																																
XI. COMPLICATIONS OF PREG- NANCY, CHILD-BIRTH, AND PUERPERIUM.																																
A 115 SEPSIS																																
F - - - - -																																
T - - - - -																																
A 116 TOXAEMIA																																
F 2 - - - - -																																
T 2 - - - - -																																
A 117 HAEMORRHAGE																																
F - - - - -																																
T - - - - -																																
A 118 ABORTION WITHOUT SEPSIS OR TOXAEMIA																																
F - - - - -																																
T - - - - -																																
A 119 ABORTION WITH SEPSIS																																
F - - - - -																																
T - - - - -																																
A 120 OTHER																																
F 1 - - - - -																																
T 1 - - - - -																																
TOTAL (A115-A120)																																
F 5 - - - - -																																
T 5 - - - - -																																
A 121 SKIN INFECTIONS																																
F 2 - - - - -																																
T 3 - - - - -																																
F 5 - - - - -																																
T 5 - - - - -																																
A 122 ARTHRITIS AND SPONDYLITIS ..																																
F 10 - - - - -																																
T 10 - - - - -																																
F 10 - - - - -																																
T 10 - - - - -																																
A 123 RHEUMATISM																																
F - - - - -																																
T 2 - - - - -																																
F 2 - - - - -																																
T 2 - - - - -																																
A 124 OSTEOMYELITIS																																
F 1 - - - - -																																
T 1 - - - - -																																
F 1 - - - - -																																
T 1 - - - - -																																
A 125 ANKYLOSIS AND ACQUIRED DEFORMITIES																																
F - - - - -																																
T - - - - -																																
F - - - - -																																
T - - - - -																																
A 126 OTHER																																
F 7 2 1 - - - - -																																
T 8 1 2 1 - - - - -																																
F 15 3 3 1 1 - - - - -																																
T 15 3 3 1 1 - - - - -																																
TOTAL (A121-A126)																																
F 20 2 3 - - - - -																																
T 21 2 3 1 - - - - -																																
F 41 3 6 1 2 1 - - - - -																																
T 41 3 6 1 2 1 - - - - -																																
XIV. CONGENITAL MALFORMATIONS.																																
A 127 SPINA BIFIDA AND MENINGOCELE.																																
A WITHOUT HYDROCEPHALUS																																
F 3 3 - - - - -																																
T 3 3 - - - - -																																
B WITH HYDROCEPHALUS																																
F 2 1 1 1 - - - - -																																
T 2 2 - - - - -																																
F 4 3 1 1 1 - - - - -																																
T 4 3 1 1 1 - - - - -																																
TOTAL (A127)																																
F 5 4 1 1 - - - - -																																
T 7 6 1 1 - - - - -																																
A 128 CIRCULATORY SYSTEM																																
F 49 44 1 1 - - - - -																																
T 34 28 2 1 1 - - - - -																																
F 83 72 3 2 1 - - - - -																																
T 83 72 3 2 1 - - - - -																																
A 129 OTHER																																
F 36 32 - - - - -																																
T 25 23 1 1 - - - - -																																
F 59 55 1 1 - - - - -																																
T 59 55 1 1 - - - - -																																
TOTAL (A127-A129)																																
F 88 80 2 2 - - - - -																																
T 61 53 3 2 1 - - - - -																																
F 149 133 6 4 1 - - - - -																																
T 149 133 6 4 1 - - - - -																																
XV. DISEASES OF EARLY INFANCY.																																
A 130 BIRTH INJURY																																
F 23 23 - - - - -																																
T 20 20 - - - - -																																
F 43 43 - - - - -																																
T 43 43 - - - - -																																
A 131 POSTNATAL ASPHYXIA AND ATELECTASIS																																
F 44 44 - - - - -																																
T 32 32 - - - - -																																
F 76 76 - - - - -																																
T 76 76 - - - - -																																
A 132 INFECTIONS OF NEWBORN																																
F 7 7 - - - - -																																
T 3 3 - - - - -																																
F 10 10 - - - - -																																
T 10 10 - - - - -																																
A 133 ERYTHROBLASTOSIS																																
F 5 5 - - - - -																																
T 4 4 - - - - -																																
F 9 9 - - - - -																																
T 9 9 - - - - -																																
A 134 OTHER DEFINED																																
F 2 2 - - - - -																																
T 6 6 - - - - -																																
F 8 8 - - - - -																																
T 8 8 - - - - -																																

TABLE 9

LIST A NO.	CAUSE OF DEATH (INTERMEDIATE LIST II (SEVENTH REVISION))	TOTAL	UNDER 15			SINGLE										MARRIED					WIDOWED AND DIVORCED					MIL STATES
			TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.	TOTAL	15-24	25-44	45-64	65-74	75	N.S.			
A 135 ILL-DEFINED	M	127	127	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	F	101	101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	T	228	228	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
TOTAL (A130-A135)	M	208	208	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	F	166	166	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
	T	374	374	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.																										
A 136 SENILITY WITHOUT PSYCHOSIS	M	18	-	4	-	-	-	-	-	4	-	-	-	-	-	-	6	-	8	-	-	-				
	F	7	-	4	-	-	-	-	-	-	-	-	-	-	-	-	1	2	14	-	-	-				
	T	39	-	8	-	-	-	-	-	4	-	-	-	-	-	-	7	2	22	-	-	-				
A 137 ILL-DEFINED AND UNKNOWN	M	166	-	28	-	3	8	9	8	-	100	-	8	38	10	76	-	-	-	-	-	-				
	F	72	-	1	-	-	-	1	3	-	32	-	8	5	8	11	16	-	1	8	-	2				
	T	238	-	29	-	3	8	9	11	-	132	-	16	43	18	87	-	-	1	8	-	2				
TOTAL (A136, A137)	M	184	-	32	-	3	8	8	8	-	138	-	16	38	10	32	-	-	44	-	-	-				
	F	93	-	9	-	-	-	1	12	-	68	-	6	13	10	32	-	-	44	-	-	-				
	T	277	-	41	-	3	8	10	19	-	206	-	22	51	20	64	-	-	88	-	-	-				
XVII. ACCIDENTS, POISONINGS AND VIOLENCE.																										
XVIII. EXTERNAL CAUSE.																										
A138 MOTOR VEHICLE ACCIDENTS.																										
A 138A TRAFFIC (810-825)	M	317	26	143	107	18	13	2	3	-	134	10	60	42	16	4	-	13	-	2	5	1				
	F	102	15	25	21	1	3	-	-	-	47	1	22	17	8	1	-	14	-	1	5	2				
	T	419	41	168	128	19	16	2	3	-	181	11	82	59	22	7	-	27	-	3	10	3				
A 138B NON-TRAFFIC	M	11	8	2	-	-	-	-	2	-	3	-	3	-	-	-	-	1	-	1	-	-				
	F	3	3	-	-	-	-	-	-	-	3	-	3	-	-	-	-	1	-	1	-	-				
	T	14	6	2	-	-	-	-	2	-	3	-	3	-	-	-	-	1	-	1	-	-				
TOTAL (A138)	M	328	29	147	109	18	13	2	8	-	137															

DIVISION OF VITAL STATISTICS

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST NO.	INTERMEDIATE LIST (SEVENTH REVISION)	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	
I. INFECTIVE AND PARASITIC DISEASES.															
TUBERCULOSIS (A1-A5).															
■	1 RESPIRATORY.														
■	ACTIVE	M	22	2	-	2	2	2	2	1	3	2	3	1	2
		F	6	-	-	1	-	1	-	1	1	-	1	-	1
		T	28	2	-	3	2	3	2	2	4	2	4	1	3
■	INACTIVE (002+2, 008+2) ..	M	1	-	-	-	-	-	-	-	1	-	-	-	-
		F	2	-	-	-	1	-	-	-	-	1	-	-	-
		T	3	-	-	-	1	-	-	-	1	1	-	-	-
	TOTAL (A1)	M	23	2	-	2	2	2	2	1	3	3	3	1	2
		F	■	-	-	1	1	1	-	1	-	2	-	-	1
		T	31	2	-	3	3	3	2	4	3	5	1	1	3
■	2 MENINGES AND CENTRAL	M	-	-	-	-	-	-	-	-	-	-	-	-	-
	NERVOUS SYSTEM	F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A	3 INTESTINE, PERITONEUM AND	M	-	-	-	-	-	-	-	-	-	-	-	-	-
	MESENTERY	F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
■	4 BONE AND JOINT	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
■	5 OTHER FORMS	M	1	-	-	-	-	1	-	-	-	-	-	-	-
		F	1	-	-	-	1	-	-	-	-	-	-	-	-
		T	2	-	-	-	1	1	-	-	-	-	-	-	-
	TOTAL (A1-A5)	M	24	2	-	2	2	3	1	3	3	3	1	2	2
		F	9	-	-	1	1	2	1	1	-	2	-	1	1
		T	33	2	-	3	3	4	2	4	3	5	1	3	3
SYPHILIS (A6-A10).															
■	6 CONGENITAL	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A	7 EARLY	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A	8 TABES DORSALIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
■	9 GENERAL PARESIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
■	10 OTHERS	M	6	1	-	1	1	-	1	-	1	1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	6	1	-	1	1	-	1	-	1	1	-	-	-
	TOTAL (A6-A10)	M	6	1	-	1	1	-	1	-	1	1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	6	1	-	1	1	-	1	-	1	1	-		

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST # NO.	CAUSE OF DEATH INTERMEDIATE LIST # (SEVENTH REVISION)		TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A 19	ERYSIPELAS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 20	SEPTICAEMIA AND PYAEMIA ...	M	2	-	-	-	-	-	-	-	-	-	-	-	2
		F	2	-	-	1	-	-	-	-	1	-	-	-	-
		T	4	-	-	1	-	-	-	-	1	-	-	-	2
A 21	DIPHTHERIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 22	WHOOPING COUGH	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	3	-	-	-	-	-	-	-	1	1	-	-	-
		T	3	-	-	-	-	-	-	-	1	1	-	-	1
A 23	MENINGOCOCCAL INFECTIONS ..	M	1	-	-	-	-	-	1	-	-	-	-	-	-
		F	1	-	-	-	-	1	-	-	-	-	-	-	-
		T	2	-	-	-	-	1	1	-	-	-	-	-	-
A 24	PLAGUE	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 25	LEPROSY	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 26	TETANUS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 27	ANTHRAX	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	ACUTE POLIOMYELITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 29	ACUTE ENCEPHALITIS	M	4	-	1	-	1	-	-	-	1	-	1	-	-
		F	2	-	-	-	-	-	-	-	-	-	-	-	-
		T	6	-	1	-	1	-	-	-	1	-	1	-	2
A 30	LATE EFFECTS OF POLIO- MYELITIS AND ENCEPHALITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 31	SMALLPOX	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 32	MEASLES	M	1	-	-	-	-	-	-	-	-	-	-	1	-
		F	5	1	1	1	-	-	1	-	-	1	-	-	-
		T	6	1	1	1	-	-	1	-	-	1	-	1	-
A 33	YELLOW FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 34	INFECTIOUS HEPATITIS	M	2	-	-	1	-	-	-	-	-	1	-	-	-
		F	2	-	-	-	-	-	-	2	-	-	-	-	-
		T	4	-	-	1	-	-	-	2	-	1	-	-	-
A 35	RABIES	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 36	TYPHUS AND OTHER RICKETT- SIAL DISEASES	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 37	MALARIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 38	SCHISTOSOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 39	HYDATID DISEASE	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	FILARIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	ANKYLOSTOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	OTHER DISEASES DUE TO HELMINTHS	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	OTHER	M	2	1	-	-	-	-	-	-	-	-	-	-	1
		F	5	1	-	-	-	-	-	-	1	1	-	-	2
		T	7	2	-	-	-	-	-	-	1	1	-	-	3
TOTAL (A1-A43).		M	42	4	1	1	4	2	4	2	4	5	5	2	5
		F	29	2	1	3	1	3	1	3	4	3	2	-	6
		T	71	6	2	7	5	5	5	5	8	8	7	2	11

DIVISION OF VITAL STATISTICS

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
II. NEOPLASMS.															
MALIGNANT NEOPLASMS (A44-A59)															
■ 44	BUCCAL CAVITY AND PHARYNX	M	21	4	3	2	2	2	-	2	-	1	1	-	4
		F	7	-	1	1	1	-	-	1	-	1	1	2	-
		T	28	4	4	3	3	2	-	3	-	1	2	2	4
A 45	ESOPHAGUS	M	22	3	2	4	3	3	1	3	-	2	-	1	-
		F	8	1	1	-	1	2	2	-	-	1	-	-	-
		T	30	4	3	4	4	5	3	3	-	2	1	1	-
A 46	STOMACH	M	115	10	6	■	6	15	■	7	7	10	19	■	10
		F	55	1	3	3	2	4	4	2	7	6	7	9	7
		T	170	11	9	11	■	19	13	9	14	16	26	17	17
A 47	INTESTINE, EXCEPT RECTUM ..	M	94	7	14	7	10	7	7	6	10	11	4	5	6
		F	96	7	5	9	4	11	8	10	6	5	7	12	12
		T	190	14	19	16	14	18	15	16	16	16	11	17	18
A 48	RECTUM	■	51	5	5	4	3	4	7	3	9	1	4	4	2
		F	31	4	3	2	2	1	3	2	1	5	4	4	-
		T	82	9	8	6	5	■	10	5	10	6	8	8	2
■ 49	LARYNX	■	15	-	1	3	1	1	■	1	-	1	1	2	3
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	15	-	1	3	1	1	1	1	-	1	1	2	3
■ 50	TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY	M	209	15	15	15	21	25	16	20	15	13	16	27	11
		F	42	1	3	2	4	3	7	6	3	4	1	4	4
		T	251	16	18	17	25	28	23	26	18	17	17	31	15
A 51	BREAST	M	1	-	-	-	-	-	-	1	-	-	-	-	-
		F	155	18	11	22	14	14	11	■	10	13	11	7	16
		T	156	18	11	22	14	14	11	9	10	13	11	7	16
A 52	CERVIX UTERI	F	31	3	7	-	3	2	1	2	2	1	1	3	6
A 53	UTERUS, OTHER PARTS	F	18	2	1	2	2	1	1	-	2	2	1	2	2
A 54	PROSTATE	■	99	9	9	5	5	4	■	9	13	8	10	12	7
■ 55	SKIN	M	14	3	1	2	3	1	2	1	1	-	-	-	-
		F	6	3	1	-	-	-	-	1	-	-	-	-	1
		T	20	6	2	2	3	1	2	2	1	-	-	-	1
■ 56	BONE AND CONNECTIVE TISSUE	M	10	1	-	1	1	1	-	-	1	1	1	2	1
		F	10	3	1	1	-	1	-	-	1	-	1	-	2
		T	20	4	1	2	1	2	-	-	2	1	2	2	3
A 57 OTHER AND UNSPECIFIED SITES.															
■	DIGESTIVE ORGANS	■	96	11	5	■	7	6	7	11	6	9	10	8	■
	(155-159)	F	70	8	3	6	8	8	3	6	7	8	4	5	4
		T	166	19	8	14	15	14	10	17	13	17	14	13	12
B	RESPIRATORY ORGANS	M	3	-	-	1	-	-	-	-	-	1	-	1	-
	(160, 164, 165)	F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	-	-	1	-	-	-	-	-	1	-	1	-
C	URINARY ORGANS	M	68	3	6	5	10	3	7	4	6	4	5	9	6
	(180, 181)	F	27	3	1	3	3	2	3	1	5	2	1	3	-
		T	95	6	7	■	13	5	10	5	11	6	6	12	■
D	BRAIN AND NERVOUS SYSTEM (193)	M	33	6	4	-	5	1	2	2	2	2	1	4	4
		F	19	2	2	1	1	6	-	1	-	3	1	1	1
		T	52	8	6	1	6	7	2	3	2	5	2	5	5
E	OTHER	M	36	3	2	2	1	2	3	2	4	5	5	3	4
		F	97	7	7	5	8	10	4	15	7	7	7	11	9
		T	133	10	9	7	9	12	7	17	11	12	12	14	13
TOTAL (A57).															
		M	236	23	17	16	23	12	19	19	18	21	21	25	22
		F	213	20	13	15	20	26	10	23	19	20	13	20	14
		T	449	43	30	31	43	38	29	42	37	41	34	45	36
■ 58	LEUKAEMIA AND ALEUKAEMIA ..	M	56	4	2	4	3	7	6	7	4	3	6	6	4
		F	31	1	2	3	2	4	4	2	3	3	3	1	3
		T	87	5	4	7	5	11	10	9	7	6	9	7	7
■ 59 LYMPHATIC AND HAEMATOPOIETIC SYSTEM.															
■	HODGKIN S (201)	M	19	-	2	2	3	2	3	1	1	-	1	2	2
		F	7	1	-	1	■	-	■	1	-	-	1	-	1
		T	26	1	2	3	4	2	4	2	1	-	2	2	3
B	OTHER	M	44	4	3	3	2	2	7	1	6	4	5	2	5
		F	23	2	3	2	5	-	2	-	2	1	2	2	2
		T	67	6	6	5	7	2	9	1	8	5	7	4	7
TOTAL (A59).															
		M	63	4	5	5	5	4	10	2	7	4	6	4	7
		F	30	3	3	3	6	-	3	1	2	1	3	2	3
		T	93	7	8	8	11	4	13	3	9	5	9	6	10
TOTAL (A44-A59).															
		■	1,006	88	80	76	86	86	86	81	85	76	89	96	77
		F	733	67	55	63	61	69	54	58	56	60	54	66	70
		T	1,739	155	135	139	147	155	140	139	141	136	143	162	147

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A 60	BENIGN AND UNSPECIFIED	M 9	1	1	1	-	1	1	1	-	-	-	2	1
	F 9	1	1	2	2	-	-	2	-	-	-	-	-	1
	T 18	2	2	3	2	1	1	3	-	-	-	-	2	2
	TOTAL (A44-A60)	M 1,015	89	111	77	86	117	87	82	85	76	119	98	78
	F 742	68	56	65	63	69	54	60	56	60	54	66	71	
	T 1,757	157	137	142	149	156	141	142	141	136	143	164	149	
III, IV. ALLERGIC, ENDOCRINE METABOLIC AND BLOOD DISEASES														
A 61	NON-TOXIC GOITRE	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 62	THYROTOXICOSIS	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 63	DIABETES MELLITUS	M 90	6	5	5	7	9	14	7	10	11	2	6	11
	F 89	11	7	7	11	4	5	4	10	7	11	9	9	
	T 179	17	12	12	15	13	19	11	20	15	10	15	20	
A 64	NUTRITIONAL DEFICIENCY STATES	M 3	-	-	2	-	1	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T 3	-	-	2	-	1	-	-	-	-	-	-	-	-
A 65	ANAEMIAS	M 11	-	2	2	1	-	1	1	-	1	1	2	-
	F 6	11	-	-	-	-	-	1	-	1	-	2	1	-
	T 17	1	2	2	1	-	2	1	1	1	1	3	3	-
A 66	OTHER	M 37	2	3	4	4	5	1	3	2	3	5	2	3
	F 25	11	2	2	2	2	2	3	2	1	4	2	2	
	T 62	3	11	6	6	7	3	6	4	4	9	4	5	
	TOTAL (A61-A66)	M 141	8	10	13	12	15	16	11	12	12	8	10	14
	F 120	13	9	11	10	11	11	7	13	8	14	12	11	
	T 261	21	19	22	22	21	24	18	25	20	22	22	25	
V. MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.														
A 67	PSYCHOSES	M 4	-	-	-	1	-	1	1	-	1	-	-	-
	F 3	-	1	-	-	-	-	1	1	-	1	-	-	-
	T 7	-	1	-	1	-	1	2	2	-	2	-	-	-
A 68	PSYCHONEUROTIC AND PERSONA- LITY DISORDERS	M 20	11	1	-	1	2	4	3	-	2	2	1	3
	F 3	1	-	-	-	1	-	-	-	-	1	-	-	-
	T 23	2	1	-	1	3	4	3	-	3	2	1	3	
A 69	MENTAL DEFICIENCY	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL (A67-A69)	M 24	1	1	-	2	2	1	4	-	3	2	1	1
	F 6	1	1	-	-	1	-	1	-	2	-	-	-	-
	T 30	2	2	-	2	3	5	5	-	5	2	1	1	
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.														
A 70	CEREBROVASCULAR LESIONS ...	M 549	58	43	42	35	49	52	61	38	42	37	48	44
	F 470	43	43	28	41	38	33	40	46	51	29	39	39	
	T 1,019	101	86	70	76	87	85	101	84	93	66	87	83	
A 71	NON-MENINGOCOCCAL MENINGITIS	M 3	-	-	-	-	1	1	1	-	-	-	-	-
	F 3	-	-	1	-	-	-	1	-	-	-	-	-	1
	T 6	-	-	1	-	1	2	1	-	-	-	-	-	1
A 72	MULTIPLE SCLEROSIS	M 4	1	-	-	-	1	-	1	-	-	1	-	-
	F 10	-	1	1	-	3	1	1	1	1	1	-	-	1
	T 14	1	1	1	-	4	1	2	1	1	1	-	-	1
A 73	EPILEPSY	M 11	-	1	-	2	2	-	1	1	2	-	1	1
	F 11	1	-	-	-	2	2	-	-	3	-	-	-	-
	T 19	1	1	-	2	4	2	1	1	5	-	1	1	
A 74	INFLAMMATORY DISEASES OF THE EYE	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 75	CATARACT	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 76	GLAUCOMA	M -	-	-	-	-	-	-	-	-	-	-	-	-
	F -	-	-	-	-	-	-	-	-	-	-	-	-	-
	T -	-	-	-	-	-	-	-	-	-	-	-	-	-
A 77	OTITIS MEDIA AND MASTOIDITIS	M 3	-	-	-	-	-	-	1	-	1	-	-	1
	F 1	-	-	-	-	-	-	-	-	-	-	-	-	1
	T 4	-	-	-	-	-	-	-	1	-	1	-	-	2

DIVISION OF VITAL STATISTICS

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A 78	OTHER	M	30	3	2	3	1	2	1	2	3	2	4	3	4
		F	33	3	-	4	5	1	3	2	7	-	2	3	3
		T	63	6	2	7	6	3	4	4	10	2	6	6	7
	TOTAL (A70-A78)	M	600	62	46	45	38	55	54	67	42	47	42	52	50
		F	525	47	44	34	46	44	40	43	54	55	31	42	45
		T	1,125	109	90	79	84	99	94	110	96	102	73	94	95
VII. DISEASES OF THE CIRCULATORY SYSTEM.															
HEART DISEASE (A79-A83).															
A 79	RHEUMATIC FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 80	CHRONIC RHEUMATIC	M	26	1	3	1	-	-	3	5	2	2	4	4	1
		F	54	3	5	3	5	5	8	5	1	9	4	2	4
		T	80	4	8	4	5	5	11	10	3	11	8	6	5
A 81	ARTERIOSCLEROTIC AND DEGENERATIVE	M	1,792	164	132	163	149	152	138	168	140	132	149	149	156
		F	871	91	70	66	70	81	61	76	59	77	70	70	80
		T	2,663	255	202	229	219	233	199	244	199	209	219	219	236
A 82	OTHER	M	92	10	6	10	6	10	7	7	3	8	6	8	11
		F	72	5	12	9	11	6	5	6	2	3	4	3	6
		T	164	15	18	19	17	16	12	13	5	11	10	11	17
A 83	HYPERTENSIVE	M	33	1	4	2	3	3	2	3	-	6	4	4	1
		F	37	7	2	2	1	3	3	5	2	5	3	4	-
		T	70	8	6	4	4	6	5	8	2	11	7	8	1
	TOTAL (A79-A83)	M	1,943	176	145	176	158	165	150	183	145	148	163	165	169
		F	1,034	106	89	80	87	95	77	92	64	94	81	79	90
		T	2,977	282	234	256	245	260	227	275	209	242	244	244	259
A 84	HYPERTENSION	M	26	5	-	1	1	4	1	3	3	-	-	5	3
		F	20	2	2	2	-	-	2	1	1	2	3	5	-
		T	46	7	2	3	1	4	3	4	4	2	3	10	3
A 85	ARTERIAL DISEASES	M	149	19	11	13	10	7	10	13	10	15	12	14	15
		F	112	8	11	8	13	2	14	12	8	13	8	7	8
		T	261	27	22	21	23	9	24	25	18	28	20	21	23
A 86	OTHER	M	40	1	1	1	2	3	5	1	4	6	6	7	3
		F	26	3	-	2	-	4	3	2	2	3	2	4	1
		T	66	4	1	3	2	7	8	3	6	9	8	11	4
	TOTAL (A79-A86)	M	2,158	201	157	191	171	179	166	200	162	169	181	191	190
		F	1,192	119	102	92	100	101	96	107	75	112	94	95	99
		T	3,350	320	259	283	271	280	262	307	237	281	275	286	289
VIII. DISEASES OF THE RESPIRATORY SYSTEM.															
A 87	ACUTE UPPER RESPIRATORY ...	M	6	1	-	-	-	-	1	-	1	1	-	1	1
		F	3	-	-	-	-	1	-	-	-	-	1	-	1
		T	9	1	-	-	-	1	1	-	1	1	1	1	2
A 88	INFLUENZA	M	8	-	-	-	2	1	2	-	-	-	-	2	1
		F	4	-	1	-	-	-	-	1	-	-	2	-	-
		T	12	-	1	-	2	1	2	1	-	-	2	2	1
PNEUMONIA (A89-A91).															
A 89	LOBAR	M	15	1	1	-	2	1	3	-	2	1	2	1	1
		F	12	-	1	2	1	2	1	-	-	1	1	1	2
		T	27	1	2	2	3	3	4	-	2	2	3	2	3
A 90	BRONCHO	M	96	7	8	11	11	12	8	4	5	3	6	10	11
		F	75	11	4	5	7	9	1	3	5	9	5	8	8
		T	171	18	12	16	18	21	9	7	10	12	11	18	19
A 91	ATYPICAL, OTHER, UNSPECIFIED	M	59	4	7	4	5	6	4	5	3	6	3	7	5
		F	42	4	3	5	3	3	3	1	5	1	5	4	5
		T	101	8	10	9	8	9	7	6	8	7	8	11	10
	TOTAL (A89-A91)	M	170	12	16	15	18	19	15	9	10	10	11	18	17
		F	129	15	8	12	11	14	5	4	10	11	11	13	15
		T	299	27	24	27	29	33	20	13	20	21	22	31	32
BRONCHITIS (A92, A93).															
A 92	ACUTE	M	2	-	-	-	-	2	-	-	-	-	-	-	-
		F	1	-	-	-	-	1	-	-	-	-	-	-	-
		T	3	-	-	-	-	3	-	-	-	-	-	-	-
A 93	CHRONIC AND UNQUALIFIED ...	M	61	5	2	4	3	5	2	9	4	9	4	10	4
		F	13	2	1	2	-	1	1	2	-	-	-	3	1
		T	74	7	3	6	3	6	3	11	4	9	4	13	5
	TOTAL (A92, A93)	M	63	5	2	4	3	7	2	9	4	9	4	10	4
		F	14	2	1	2	-	2	1	2	-	-	-	3	1
		T	77	7	3	6	3	9	3	11	4	9	4	13	5
A 94	TONSILS AND ADENOIDS	M	2	-	1	-	-	-	-	1	-	-	-	-	-
		F	2	-	1	-	-	1	-	-	-	-	-	-	-
		T	4	-	2	-	-	1	-	1	-	-	-	-	-

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A 95	EMPHYEMA AND LUNG ABSCESS .. M	2	-	-	-	-	-	-	-	1	-	1	-	-
	F	2	-	-	-	-	-	-	-	-	-	-	-	-
	T	2	-	-	-	-	-	-	-	1	-	1	-	-
A 96	PLEURISY	2	-	-	1	-	-	1	-	-	-	-	-	-
	F	3	1	-	-	-	-	-	-	-	1	-	1	-
	T	5	1	-	1	-	-	1	-	-	1	-	1	-
A 97	OTHER	103	9	15	12	6	3	9	11	9	7	7	7	11
	F	37	4	3	2	3	2	2	3	3	6	2	2	5
	T	140	13	18	14	9	5	11	14	12	13	9	9	13
	TOTAL (A87-A97)	356	27	34	32	29	30	30	30	25	27	23	38	31
	F	192	22	14	16	14	20	8	10	13	18	16	19	22
	T	548	49	48	48	43	50	38	40	38	45	39	57	53
IX. DISEASES OF THE DIGESTIVE SYSTEM.														
A 98	DISEASES OF THE TEETH	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 99	ULCER OF THE STOMACH	15	2	1	-	-	2	3	1	-	2	3	1	-
	F	9	-	-	2	-	2	2	2	-	-	-	-	1
	T	24	2	1	2	-	4	5	3	-	2	3	1	1
A 100	ULCER OF THE DUODENUM	21	1	2	1	3	3	5	2	-	-	1	-	3
	F	11	-	-	1	-	1	3	1	-	1	1	2	1
	T	32	1	2	2	3	4	8	3	-	1	2	2	4
A 101	GASTRITIS AND DUODENITIS ..	1	-	-	-	-	-	-	-	1	-	-	-	-
	F	1	-	-	-	-	-	-	-	-	-	-	-	-
	T	1	-	-	-	-	-	-	-	1	-	-	-	-
A 102	APPENDICITIS	7	1	1	1	1	1	2	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	7	1	1	1	1	1	2	-	-	-	-	-	-
A 103	INTESTINAL OBSTRUCTION AND HERNIA	36	4	2	2	3	3	3	3	1	2	2	8	3
	F	23	3	3	1	3	2	3	2	1	-	1	2	2
	T	59	7	5	3	6	5	6	5	2	2	3	10	5
A 104	GASTRO-ENTERITIS AND COLITIS	20	3	1	2	1	-	2	2	2	1	1	3	2
	F	36	3	3	1	1	6	1	3	4	2	7	1	4
	T	56	6	4	3	2	6	3	5	6	3	8	4	6
A 105	CIRRHOSIS OF LIVER	48	4	4	6	2	1	5	2	5	4	9	3	3
	F	29	1	2	2	6	5	4	3	-	-	5	1	-
	T	77	5	6	8	8	6	9	5	5	4	14	4	3
A 106	CHOLELITHIASIS AND CHOLECY- STITIS	17	1	1	-	2	1	1	3	2	2	2	1	1
	F	27	1	1	2	1	2	3	2	2	3	6	2	2
	T	44	2	2	2	3	3	4	5	4	5	8	3	3
A 107	OTHER	43	3	5	5	5	8	1	2	3	1	4	2	4
	F	20	2	2	2	2	1	1	2	1	2	-	1	4
	T	63	5	7	7	7	9	2	4	4	3	4	3	11
	TOTAL (A98-A107)	208	19	17	17	17	19	22	15	14	12	22	18	16
	F	155	10	11	11	13	19	17	15	8	11	20	9	14
	T	363	29	28	28	30	38	39	30	22	20	42	27	30
X. DISEASES OF THE GENITO- URINARY SYSTEM.														
A 108	ACUTE NEPHRITIS	2	-	-	-	1	-	-	-	-	1	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	2	-	-	-	1	-	-	-	-	1	-	-	-
A 109	CHRONIC AND OTHER NEPHRITIS	30	2	2	2	3	1	1	1	4	3	3	4	4
	F	20	3	2	4	2	2	1	1	1	1	1	-	2
	T	50	5	4	6	5	3	2	2	5	4	4	4	6
A 110	INFECTIONS OF KIDNEY	22	1	1	-	3	2	2	-	-	2	4	3	4
	F	19	-	1	4	-	1	1	-	4	1	2	2	3
	T	41	1	2	4	3	3	3	-	4	3	6	5	7
A 111	CALCULI	2	-	-	1	-	-	-	-	1	-	-	-	-
	F	4	-	-	-	-	-	2	-	-	-	2	-	-
	T	6	-	-	1	-	-	2	-	1	-	2	-	-
A 112	HYPERPLASIA OF PROSTATE ...	27	2	2	2	3	2	1	4	3	1	3	2	2
A 113	BREAST	-	-	-	-	-	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-	-	-	-	-	-
	T	-	-	-	-	-	-	-	-	-	-	-	-	-
A 114	OTHER	6	2	-	1	-	1	-	-	-	-	-	2	-
	F	11	1	1	1	-	1	1	-	1	-	1	3	1
	T	17	3	1	2	-	2	1	-	1	-	1	5	1
	TOTAL (A108-A114)	89	7	5	6	10	6	4	5	8	7	10	11	10
	F	54	4	4	11	2	4	5	1	6	2	6	5	6
	T	143	11	9	15	12	10	9	6	14	9	16	16	16

DIVISION OF VITAL STATISTICS

TABLE 10

DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
XI. COMPLICATIONS OF PREGNANCY, CHILDBIRTH, AND PUERPERIUM.														
A 115	SEPSIS	F	-	-	-	-	-	-	-	-	-	-	-	-
A 116	TOXAEMIA	F	2	-	1	-	-	-	-	-	-	-	1	-
A 117	HAEMORRHAGE	F	2	1	-	-	-	-	-	-	-	-	-	1
A 118	ABORTION WITHOUT SEPSIS OR TOXAEMIA	F	-	-	-	-	-	-	-	-	-	-	-	-
A 119	ABORTION WITH SEPSIS	F	-	-	-	-	-	-	-	-	-	-	-	-
A 120	OTHER	F	1	1	-	-	-	-	-	-	-	-	-	-
	TOTAL (A115-A120).	F	5	2	1	-	-	-	-	-	-	-	1	1
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM.														
A 121	SKIN INFECTIONS	M	2	-	-	-	-	1	-	-	-	1	-	-
		F	3	-	1	-	1	-	-	-	-	-	1	-
		T	5	-	1	-	1	1	-	-	-	1	1	-
A 122	ARTHRITIS AND SPONDYLITIS	M	10	-	1	2	-	-	-	1	-	-	4	2
		F	8	1	1	-	-	1	-	1	2	-	2	-
		T	18	1	2	2	-	1	-	2	2	-	6	2
A 123	RHEUMATISM	M	-	-	-	-	-	-	-	-	-	-	-	-
		F	2	-	-	1	-	1	-	-	-	-	-	-
		T	2	-	-	1	-	1	-	-	-	-	-	-
A 124	OSTEOMYELITIS	M	1	-	-	-	-	-	-	-	1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	1	-	-	-
A 125	ANKYLOSIS AND ACQUIRED DEFORMITIES	M	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-
A 126	OTHER	M	7	1	-	-	1	-	1	-	-	-	3	-
		F	8	-	-	1	1	-	2	-	2	1	-	1
		T	15	1	-	1	2	-	3	1	2	1	3	1
	TOTAL (A121-A126).	M	20	1	1	2	1	1	1	1	1	1	7	1
		F	21	1	2	2	2	1	3	3	2	1	3	1
		T	41	2	3	4	3	2	4	1	3	2	10	2
XIV. CONGENITAL MALFORMATIONS.														
A 127	SPINA BIFIDA AND MENINGOCELE.													
A	WITHOUT HYDROCEPHALUS	M	3	-	-	-	-	1	-	-	-	1	-	1
		F	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	-	-	-	-	1	-	-	-	1	-	1
B	WITH HYDROCEPHALUS	M	2	-	1	-	-	-	-	1	-	-	-	-
		F	2	-	-	-	-	-	1	-	-	1	-	-
		T	4	-	1	-	-	-	1	1	-	1	-	-
	TOTAL (A127).	M	5	-	1	-	-	1	-	1	-	1	-	1
		F	2	-	-	-	-	-	1	-	-	1	-	-
		T	7	-	1	-	-	1	1	1	-	2	-	1
A 128	CIRCULATORY SYSTEM	M	49	2	-	6	6	5	9	3	4	3	3	6
		F	34	4	3	3	1	-	1	8	2	3	3	4
		T	83	6	3	9	7	5	10	11	6	5	6	10
A 129	OTHER	M	34	3	4	2	3	3	3	1	6	2	2	5
		F	25	3	-	2	2	3	5	1	-	2	2	3
		T	59	6	4	4	5	6	8	2	6	4	4	8
	TOTAL (A127-A129).	M	88	5	5	8	8	13	4	11	5	3	5	12
		F	61	7	3	4	3	8	10	2	4	6	5	7
		T	149	12	8	13	12	21	14	13	9	9	10	19
XV. DISEASES OF EARLY INFANCY.														
A 130	BIRTH INJURY	M	23	3	1	1	3	-	4	1	4	2	1	1
		F	20	3	2	-	1	2	1	4	-	4	1	-
		T	43	6	3	1	4	2	5	5	4	6	2	1
A 131	POSTNATAL ASPHYXIA AND ATELECTASIS	M	44	3	-	5	8	3	2	5	5	2	6	1
		F	32	4	5	5	2	2	2	1	2	1	2	3
		T	76	7	5	10	10	5	4	6	7	3	8	4
A 132	INFECTIONS OF NEWBORN	M	7	-	-	-	-	-	2	2	1	-	1	1
		F	3	1	-	-	-	-	-	-	-	1	-	1
		T	10	1	-	-	-	-	2	2	1	1	-	2
A 133	ERYTHROBLASTOSIS	M	5	-	-	1	-	1	-	-	-	1	2	-
		F	4	-	1	-	-	1	-	-	1	1	-	-
		T	9	-	1	1	-	2	-	-	1	2	-	-
A 134	OTHER DEFINED	M	2	1	-	-	-	-	-	-	-	-	1	-
		F	6	1	-	2	1	1	-	1	-	-	-	-
		T	8	2	-	2	1	1	-	1	-	-	1	-

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)		TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
A 135	ILL-DEFINED	M	127	8	12	11	13	16	17	10	11	4	12	4	12
		F	101	11	4	15	5	10	12	7	5	5	11	9	7
		T	228	19	16	23	18	26	29	17	16	9	23	13	19
	TOTAL (A130-A135).	M	208	15	13	15	24	20	25	18	21	9	22	11	15
		F	166	20	12	22	9	16	15	13	8	12	14	14	11
		T	374	35	25	37	33	36	40	31	29	21	36	25	26
XVI. SYMPTOMS, SENILITY AND ILL-DEFINED CONDITIONS.															
A 136	SENILITY WITHOUT PSYCHOSIS	M	18	-	1	2	2	1	2	3	2	3	-	-	2
		F	21	1	1	4	3	1	1	1	1	5	2	1	-
		T	39	1	2	6	5	2	3	4	3	8	2	1	2
A 137	ILL-DEFINED AND UNKNOWN ...	M	166	16	18	17	14	7	11	14	13	15	13	15	13
		F	72	3	5	5	10	6	10	1	6	10	6	4	6
		T	238	19	23	22	24	13	21	15	19	25	19	19	19
	TOTAL (A136, A137).	M	184	16	19	19	16	11	13	17	15	18	13	15	15
		F	93	4	6	9	13	7	11	2	7	15	8	5	6
		T	277	20	25	28	29	15	24	19	22	33	21	20	21
XVII. ACCIDENTS, POISONINGS AND VIOLENCE.															
XVIII. EXTERNAL CAUSE.															
AE 138 MOTOR VEHICLE ACCIDENTS.															
A	TRAFFIC (810-825)	M	317	19	17	16	26	29	27	26	38	38	41	24	16
		F	102	7	4	3	5	9	11	8	9	9	15	11	11
		T	419	26	21	19	31	38	38	34	47	47	56	35	27
B	NON-TRAFFIC	M	11	1	1	-	1	1	-	-	2	-	2	1	2
		F	3	1	-	-	-	1	-	-	-	1	-	-	-
		T	14	2	1	-	1	2	-	-	2	1	2	1	2
	TOTAL (AE138).	M	328	20	18	16	27	30	27	26	40	38	43	25	18
		F	105	8	4	3	5	10	11	8	9	10	15	11	11
		T	433	28	22	19	32	40	38	34	49	48	58	36	29
AE 139 OTHER TRANSPORT ACCIDENTS.															
A	DROWNINGS INVOLVING SMALL BOATS (850)	M	3	-	-	-	-	-	-	2	1	-	-	-	-
		F	2	-	-	-	-	-	1	1	-	-	-	-	-
		T	5	-	-	-	-	-	1	3	1	-	-	-	-
B	DROWNINGS INVOLVING OTHER WATERCRAFT (851)	M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-
C	OTHER TRANSPORT	M	24	2	1	1	2	3	5	3	2	2	1	2	-
		F	1	-	-	-	-	-	-	1	-	-	-	-	-
		T	25	2	1	1	2	3	5	4	2	2	1	2	-
	TOTAL (AE139).	M	27	2	1	1	2	3	5	5	3	2	1	2	-
		F	3	-	-	-	-	-	1	2	-	-	-	-	-
		T	30	2	1	1	2	3	6	7	3	2	1	2	-
AE 140	ACCIDENTAL POISONING	M	35	6	3	1	4	1	2	1	3	5	-	2	7
		F	7	2	-	2	1	-	-	-	-	-	1	1	-
		T	42	8	3	3	5	1	2	1	3	5	1	3	7
AE 141	ACCIDENTAL FALLS	M	71	4	4	7	6	2	11	7	9	5	3	3	13
		F	61	3	2	4	3	7	6	6	6	6	7	2	9
		T	132	7	6	11	9	9	14	13	15	11	10	5	22
AE 142	ACCIDENT CAUSED BY MACHINERY	M	20	1	-	3	1	-	3	3	-	4	2	3	-
		F	1	-	-	-	-	-	1	-	-	-	-	-	-
		T	21	1	-	3	1	-	4	3	-	4	2	3	-
AE 143	ACCIDENT CAUSED BY FIRE AND EXPLOSION	M	36	1	-	5	5	1	3	4	4	5	-	5	3
		F	18	-	-	5	-	-	2	1	1	1	1	2	5
		T	54	1	-	10	5	1	5	5	5	6	1	7	8
AE 144	OTHER ACCIDENTAL BURNS	M	2	-	-	-	-	1	-	-	-	-	1	-	-
		F	1	-	-	-	1	-	-	-	-	-	-	-	-
		T	3	-	-	-	1	1	-	-	-	-	1	-	-
AE 145	ACCIDENT CAUSED BY FIREARM	M	14	-	-	1	2	-	-	1	-	1	2	5	2
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	14	-	-	1	2	-	-	1	-	1	2	5	2
AE 146	ACCIDENTAL DROWNING	M	48	1	-	-	1	2	8	20	10	3	1	2	-
		F	9	-	-	-	-	-	2	3	2	2	-	-	-
		T	57	1	-	-	1	2	10	23	12	5	1	2	-
AE 147	ALL OTHER ACCIDENTAL CAUSES	M	48	7	3	3	6	5	1	9	3	4	2	3	2
		F	21	1	1	4	2	2	-	4	3	-	-	1	3
		T	69	8	4	7	8	7	1	13	6	4	2	4	5
	TOTAL (AE138-AE147).	M	629	42	29	37	54	45	57	76	72	67	55	50	45
		F	226	14	7	18	12	19	23	24	21	19	24	17	28
		T	855	56	36	55	66	64	80	100	93	86	79	67	73
AE 148	SUICIDE	M	110	12	9	10	10	11	10	3	9	11	9	10	6
		F	27	2	2	2	2	1	2	6	1	3	3	1	2
		T	137	14	11	12	12	12	12	9	10	14	12	11	8

DIVISION OF VITAL STATISTICS

TABLE 10
DEATHS BY CAUSE, SEX AND MONTH OF DEATH, ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
AE 149	HOMICIDE	M 23 F 14 T 37	1 1 2	3 2 5	3 1 4	- 1 1	3 1 4	3 - 3	3 4 7	- 1 1	1 1 2	1 - 1	4 2 6	1 - 1
AE 150	WAR INJURIES	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
	TOTAL (AE138-AE150).	M 762 F 267 T 1,029	55 17 72	41 11 52	50 21 71	64 15 79	59 21 80	70 25 95	82 34 116	81 23 104	79 23 102	65 27 92	64 20 84	52 30 82
NXVII. NATURE OF INJURY.														
AN 138	FRACTURE OF SKULL	M 138 F 29 T 167	7 1 8	7 1 8	10 1 11	15 1 16	9 1 10	11 6 17	17 5 22	14 2 16	16 2 18	15 5 20	10 3 13	7 1 8
AN 139	FRACTURE OF SPINE AND TRUNK	M 35 F 17 T 52	2 1 3	3 2 5	1 - 1	5 1 6	4 3 7	5 1 6	4 - 4	5 3 8	2 2 4	1 1 2	3 1 4	- 2 2
AN 140	FRACTURE OF LIMBS	M 46 F 55 T 101	2 2 4	- 2 2	4 3 7	3 3 6	1 5 6	8 7 15	4 5 9	7 7 14	4 4 8	4 6 10	2 1 3	7 10 17
AN 141	DISLOCATION WITHOUT FRACTURE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 142	SPRAINS AND STRAINS	M 1 F - T 1	- - -	- - -	- - -	1 - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
AN 143	OTHER HEAD INJURY	M 127 F 27 T 154	9 1 10	10 1 11	10 2 12	7 2 9	11 2 10	9 1 10	12 4 16	8 3 11	19 3 22	13 2 15	15 3 18	7 3 10
AN 144	INTERNAL INJURY	M 187 F 46 T 233	11 3 14	8 2 10	14 2 16	16 2 18	17 4 21	19 3 22	11 4 15	19 2 21	16 5 21	24 9 33	18 5 23	14 5 19
AN 145	OPEN WOUNDS	M 14 F 3 T 17	- - -	- - -	2 - 2	- - -	2 2 4	- - -	- - -	3 - 3	1 - 1	1 - 1	2 - 3	3 - 3
AN 146	SUPERFICIAL INJURY OR CONTUSION	M - F 2 T 2	- - -	- - -	- - -	- - -	1 1 -	- - -	- - -	- - -	1 1 -	- - -	- - -	- - -
AN 147	FOREIGN BODY THROUGH ORIFICE	M 16 F 4 T 20	5 1 6	1 - 1	1 - 1	1 1 1	3 1 4	1 - 1	2 - 2	- 1 1	1 - 1	1 - 1	- - -	1 - 1
AN 148	BURNS	M 35 F 17 T 52	1 - 1	- - -	3 5 8	2 1 3	4 1 5	3 1 4	4 1 4	4 1 5	5 1 6	2 - 2	3 2 5	4 5 9
AN 149	POISONINGS	M 72 F 33 T 105	13 11 21	11 1 9	3 4 7	8 2 10	6 - 6	4 2 6	2 7 9	4 - 4	7 3 10	2 4 6	6 1 7	9 1 10
AN 150	OTHER	M 91 F 34 T 125	5 - 5	4 2 6	2 4 6	7 2 9	5 1 6	10 4 14	26 9 35	17 4 21	8 2 10	2 - 2	5 3 8	- 3 3
	TOTAL (AN138-AN150).	M 762 F 267 T 1,029	55 17 72	41 11 52	50 21 71	64 15 79	59 21 80	70 25 95	82 34 116	81 23 104	79 23 102	65 27 92	64 20 84	52 30 82
	ALL CAUSES.	M 5,895 F 3,628 T 9,523	510 337 847	431 277 708	479 298 777	483 291 774	491 315 806	510 289 799	538 306 844	481 272 753	470 324 794	486 293 779	523 296 819	493 330 823

TABLE 11

INFANT DEATHS AND HOSPITAL INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

		....TOTAL INFANT DEATHS....				...INFANT HOSPITAL DEATHS..			
		TOTAL BY OCCUR.	TOTAL BY RESID.	OCCUR. RESID.	RESID. OCCUR.	TOTAL BY OCCUR.	TOTAL BY RESID.	OCCUR. RESID.	RESID. OCCUR.
01	DIVISION 1								
007	BOW ISLAND								
040	MEDICINE HAT								
047	REDCLIFF	8	7	1		8	7	1	
	TOTAL	8	1 8	1	1	8	1 8		1
02	DIVISION 2								
009	BROOKS								
014	COALDALE	7	5	2		5	3	2	
035	LETHBRIDGE	1		1		1		1	
081	PICTURE BUTTE	17	16	3	2	16	15	3	2
046	RAYMOND		1		1		1		1
056	TABER	3	2	2	1	3	2	2	1
	TOTAL	32	32	4	4	26	26	4	4
03	DIVISION 3								
012	CARDSTON	1	1			1	1		
013	CLARESHOLM	2	1	1		2	1	1	
025	FORT MACLEOD	1		1		1		1	
037	MAGRATH	1	2		1	1	2		1
044	PINCHER CREEK								
	TOTAL	11	13	1	3	8	10	1	3
04	DIVISION 4								
028	HANNA	1	1	1	1	1	1	1	1
	TOTAL	3	6	1	4	3	6	1	4
05	DIVISION 5								
020	DRUMHELLER	2	1	1		1		1	
057	THREE HILLS								
060	VULCAN	1	2		1	1	2		1
	TOTAL	4	11		7	3	10		7
06	DIVISION 6								
010	CALGARY	177	155	24	2	152	131	22	1
018	DIDSBURY	3	2	2	1	2	2	1	1
030	HIGH RIVER	1		1		1		1	
042	OLDS		2		2		2		2
	TOTAL	187	172	19	4	158	145	16	3
07	DIVISION 7								
065	CASTOR	1		1		1		1	
076	PROVOST	3	2	1		3	2	1	
053	STETTTLER	6	3	3		6	3	3	
061	WAINWRIGHT	4	4	1	1	4	4	1	1
	TOTAL	17	20	4	7	16	19	4	7
08	DIVISION 8								
031	INNISFAIL	1	2	1	2	1	2	1	2
033	LACOMBE								
045	PONOKA	3	3	1	1	3	3	1	1
048	RED DEER	16	13	3		14	11	3	
072	RIMBEY								
050	ROCKY MOUNTAIN HOUSE	5	4	2	1	4	3	2	1
055	SYLVAN LAKE								
	TOTAL	29	34	1	6	23	28	1	6
09	DIVISION 9								
075	BELLEVUE								
005	BLAIRMORE		2		2		2		2
079	CANMORE								
016	COLEMAN		4		4		4		4
	TOTAL	11	12	3	4	9	8	3	2
10	DIVISION 10								
011	CAMROSE	5	6		1	4	5		1
036	LLOYDMINSTER								
085	TWO HILLS								
058	VEGREVILLE	3	1	2		3	1	2	
059	VERMILION								
074	VIKING								
	TOTAL	13	21	1	9	12	20	1	9

DIVISION OF VITAL STATISTICS

TABLE 11

INFANT DEATHS AND HOSPITAL INFANT DEATHS BY OCCURRENCE AND RESIDENCE FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION AND OVER, ALBERTA, 1967

....TOTAL INFANT DEATHS....
 TOTAL TOTAL OCCUR. RESID.
 BY BY = =
 OCCUR. RESID. RESID. OCCUR.

...INFANT HOSPITAL DEATHS..
 TOTAL TOTAL OCCUR. RESID.
 BY BY = =
 OCCUR. RESID. RESID. OCCUR.

11 DIVISION 11

017 DEVON	5	3	3	1	5	3	3	1
019 DRAYTON VALLEY	186	127	65	6	172	115	63	6
021 EDMONTON	1	2		1	1	2		1
026 FORT SASKATCHEWAN								
034 LEDUC		1		1		1		1
051 ST. ALBERT	2	1	2	1	1	1	1	1
054 STONY PLAIN	1		1		1		1	
063 WETASKIWIN	198	151	56	9	180	134	55	9
TOTAL								

12 DIVISION 12

006 BONNYVILLE	1	1			1	1		
015 COLD LAKE	5	2	4	1	5	2	4	1
039 FORT MCMURRAY	11	7	5	1	11	7	5	1
066 GRAND CENTRE		2		2		2		2
069 LAC LA BICHE	5	4	1		5	4	1	
052 ST. PAUL	4	2	2		4	2	2	
TOTAL	35	40	2	7	31	36	2	7

13 DIVISION 13

001 ATHABASCA	3		3		3		3	
002 BARRHEAD	4	3	1		4	3	1	
049 REDWATER								
062 WESTLOCK	4		4		4		4	
TOTAL	16	24	1	9	11	18	1	8

14 DIVISION 14

022 EDSON	1	1			1	1		
068 HINTON	4	5	2	3	3	4	2	3
077 WHITECOURT	2	1	1		1	1		
TOTAL	10	15	1	6	5	11		6

15 DIVISION 15

078 BEAVERLODGE	1		1		1		1	
023 FAIRVIEW	7	3	5	1	6	3	4	1
027 GRANDE PRAIRIE		1		1		1		1
067 GRIMSHAW	10	3	7		9	2	7	
029 HIGH PRAIRIE								
080 MANNING	1		1		1		1	
038 MCLENNAN	6	2	4		5	2	3	
043 PEACE RIVER	1	1						
082 SLAVE LAKE	1	1			1	1		
083 SPIRIT RIVER	1	1	1	1	1	1	1	1
073 VALLEYVIEW	47	56		9	35	43		8
TOTAL								
PROVINCE TOTAL	621	615	12	6	528	522	11	5

TABLE 12
- SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE, ALBERTA, 1967

TABLE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
INT. LIST NO.	CAUSE OF DEATH (SEVENTH REVISION)	TOTAL	SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, ALBERTA, 1967																			POST-NEONATAL																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			TOTAL -28 DAYS	-1 DAY	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS	7-13 DAYS	14-20 DAYS	21-27 DAYS	28 DAYS	TOTAL 28+ DAYS	1 YEAR	2 MOS	3 MOS	4 MOS	5 MOS	6 MOS	7 MOS	8 MOS	9 MOS	10 MOS	11 MOS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
I. INFECTIVE AND PARASITIC DISEASES.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
001-019	TUBERCULOSIS	M F T	1 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -

TABLE 12

75

DIVISION OF VITAL STATISTICS

TABLE 13
 INFANT DEATHS BY MONTH, AGE, AND SEX, ALBERTA, 1967

Age		Total	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
Under 1 day	M	141	11	10	9	18	11	15	9	11	5	18	10	14
	F	108	13	7	15	10	10	10	8	2	8	6	11	8
	T	249	24	17	24	28	21	25	17	13	13	24	21	22
1 day	M	27	2	2	4	5	3	4	2	3		1		1
	F	21	3	1	2	1	2	1	2	3	2	1	2	1
	T	48	5	3	6	6	5	5	4	6	2	2	2	2
2 days	M	24	1			1	3	7	3	3	2	1	2	1
	F	17	2	2	3	1	1	3		2	1		2	
	T	41	3	2	3	2	4	10	3	5	3	1	4	1
3 days	M	11		1	2		2	2		1		1	2	
	F	7			1		2					2		2
	T	18		1	3		4	2		1		3	2	2
4 days	M	7	1						1	2	1			2
	F	3						1	2					
	T	10	1					1	3	2	1			2
5 days	M	2							1		1			
	F	4								1	1			
	T	6	2						1	1	2			
6 days	M	5	1					2				2		
	F	1												1
	T	6	1					2				2		1
Under 7 days	M	217	16	13	15	24	19	30	16	20	9	23	14	18
	F	161	20	10	21	12	15	15	12	8	12	9	15	12
	T	378	36	23	36	36	34	45	28	28	21	32	29	30
7-13 days	M	11				1		3	1	2	2	1		1
	F	7						2	2			2		1
	T	18				1		5	3	2	2	3		2
14-20 days	M	4		1		1		1		1		1		1
	F	4		1							1			
	T	8		2		1		1		1	1	1		1
21-27 days	M	4				2	1		1					
	F	4			1			1						2
	T	8			1	2	1	1	1					2
Under 28 days	M	236	16	14	15	28	20	34	18	23	11	24	14	19
	F	176	20	11	22	12	15	18	14	8	13	12	15	16
	T	412	36	25	37	40	35	52	32	31	24	36	29	35
28 days— Under 2 Months	M	26	1		2	2	1	2	2	4	2	3	2	5
	F	28	5	2	2			3	4	1	4	5	1	1
	T	54	6	2	4	2	1	5	6	5	6	8	3	6
2 Months	M	18	2	1	3	1	3		2	2		2	1	1
	F	18	4		1			1				3	3	4
	T	36	6	1	4	1	5	1	2	2		5	4	5
3 Months	M	15	1	2	3		2	2		2		1	1	1
	F	13	1		1			2	2	2	2	2		1
	T	28	2	2	4		2	4	2	4	2	3	1	2
4 Months	M	5		2	1		1					1		
	F	11		3	2				1			1		
	T	16	2	5	3		1	2	1			2		
5 Months	M	10	1		1		1			2	2	1	2	
	F	11	2		3	1			2		1			1
	T	21	3		4	1	2		2	2	3	1	2	1
6 Months	M	3					1			1				1
	F	6	1	1		2			1				1	
	T	9	1	1		2	1		1	1			1	1
7 Months	M	6		2		2	1	1						
	F	2								1			1	
	T	8		2		2	1	1		1			1	
8 Months	M	6			1	1	1				1		1	1
	F	8	1		2	1	1		1	1		1		
	T	14	1		3	2	2		1	1	1	1	1	1
9 Months	M	1	1											
	F	2												
	T	3	1							1		1		
10 Months	M	2					1							
	F	7	1		1		1		1			2	1	1
	T	9	1		1		2		1			2	1	1
11 Months	M	1					1					1		
	F	4			1	1	1							
	T	5			1	1	2					1		
Under 1 year	M	329	22	21	26	34	33	39	22	34	16	32	21	29
	F	286	37	17	35	17	21	26	26	14	20	28	22	23
	T	615	59	38	61	51	54	65	48	48	36	60	43	52

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967

Int'l list No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	N.W.T.
	All causes	T	150,283	3,117	1,038	6,638	4,894	38,665	54,878	7,629	7,441	9,523	16,170	73	217
		M	88,300	1,830	603	3,829	2,851	22,474	31,694	4,549	4,678	5,895	9,720	49	128
		F	61,983	1,287	435	2,809	2,043	16,191	23,184	3,080	2,763	3,628	6,450	24	89
	I. INFECTIVE AND PARA- SITIC DISEASES	T	1,131	30	5	57	35	410	314	55	50	71	95	-	9
		M	722	24	3	40	17	277	200	32	29	42	57	-	1
		F	409	6	2	17	18	133	114	23	21	29	38	-	8
A 1	Tuberculosis of respir- atory system	T	611	15	-	31	24	297	129	26	18	31	35	-	5
		M	430	12	-	25	12	211	94	17	10	23	26	-	-
		F	181	3	-	6	12	86	35	9	8	8	9	-	5
a.	Active	T	474	12	-	20	19	266	82	15	4	28	24	-	4
		M	346	11	-	16	11	189	62	12	4	22	19	-	-
		F	128	1	-	4	8	77	20	3	-	6	5	-	4
b.	Inactive (002, 2,008, 2)	T	137	3	-	11	5	31	47	11	14	3	11	-	1
		M	84	1	-	9	1	22	32	5	6	1	7	-	-
		F	53	2	-	2	4	9	15	6	8	2	4	-	1
A 2	Tuberculosis of meninges and central nervous system	T	10	-	-	1	-	4	2	1	1	-	-	-	1
		M	5	-	-	-	-	3	-	1	1	-	-	-	-
		F	5	-	-	1	-	1	2	-	-	-	-	-	1
A 3	Tuberculosis of intestines, peritoneum and mesen- teric glands	T	2	-	-	-	-	1	-	1	-	-	-	-	-
		M	1	-	-	-	-	1	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	1	-	-	-	-	-
A 4	Tuberculosis of bones and joints	T	2	-	-	-	-	1	1	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	2	-	-	-	-	1	1	-	-	-	-	-	-
A 5	Tuberculosis, all other forms	T	33	1	-	1	-	6	12	5	2	2	4	-	-
		M	19	1	-	-	-	1	8	4	2	1	2	-	-
		F	14	-	-	1	-	5	4	1	-	1	2	-	-
A 6	Congenital syphilis	T	1	-	-	-	-	-	1	-	-	-	-	-	-
		M	1	-	-	-	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 7	Early syphilis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 8	Tabes dorsalis	T	3	-	-	-	-	2	-	-	-	-	1	-	-
		M	2	-	-	-	-	1	-	-	-	-	1	-	-
		F	1	-	-	-	-	1	-	-	-	-	-	-	-
A 9	General paralysis of insane	T	9	1	-	-	-	4	3	-	-	-	1	-	-
		M	8	1	-	-	-	3	3	-	-	-	1	-	-
		F	1	-	-	-	-	1	-	-	-	-	-	-	-
A 10	All other syphilis	T	55	-	-	4	1	7	24	1	6	6	6	-	-
		M	41	-	-	4	-	6	17	1	4	6	3	-	-
		F	14	-	-	-	1	1	7	-	2	-	3	-	-
A 11	Gonococcal infection	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 12	Typhoid fever	T	1	-	-	-	-	-	-	-	1	-	-	-	-
		M	1	-	-	-	-	-	-	-	1	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 13	Paratyphoid fever and other Salmonella	T	5	-	-	-	-	2	2	-	-	-	1	-	-
		M	1	-	-	-	-	1	-	-	-	-	-	-	-
		F	4	-	-	-	-	1	2	-	-	-	1	-	-
A 14	Cholera	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 15	Brucellosis (undulant fever)	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 16	Dysentery, all forms	T	5	-	-	-	-	-	1	1	1	-	2	-	-
		M	2	-	-	-	-	-	-	1	-	-	1	-	-
		F	3	-	-	-	-	-	1	-	1	-	-	-	-
A 17	Scarlet fever	T	1	-	-	-	-	-	1	-	-	-	-	-	-
		M	1	-	-	-	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 18	Streptococcal sore throat	T	3	-	-	1	-	1	-	-	-	-	1	-	-
		M	1	-	-	1	-	-	-	-	-	-	-	-	-
		F	2	-	-	-	-	1	-	-	-	-	1	-	-
A 19	Erysipelas	T	5	-	-	-	1	-	4	-	-	-	-	-	-
		M	2	-	-	-	1	-	1	-	-	-	-	-	-
		F	3	-	-	-	-	-	3	-	-	-	-	-	-
A 20	Septicaemia and pyaemia	T	48	3	1	3	-	8	20	3	4	4	2	-	-
		M	33	3	-	3	-	6	13	1	4	2	1	-	-
		F	15	-	1	-	-	2	7	2	-	2	1	-	-
A 21	Diphtheria	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 22	Whooping cough	T	15	1	-	-	-	5	3	-	2	3	1	-	-
		M	6	-	-	-	-	3	1	-	1	-	1	-	-
		F	9	1	-	-	-	2	2	-	1	3	-	-	-
A 23	Meningococcal infections	T	38	5	-	2	2	9	12	-	1	2	5	-	-
		M	25	5	-	-	1	7	8	-	1	1	2	-	-
		F	13	-	-	2	1	2	4	-	-	1	3	-	-

DIVISION OF VITAL STATISTICS

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	NWT
A 24	Plague	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 25	Leprosy	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 26	Tetanus	T	5	-	-	-	1	-	2	1	-	-	1	-	-
		M	4	-	-	-	-	-	2	1	-	-	1	-	-
		F	1	-	-	-	1	-	-	-	-	-	-	-	-
A 27	Anthrax	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	Acute poliomyelitis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 29	Acute infectious encephalitis	T	36	2	-	-	1	7	18	-	-	6	2	-	-
		M	18	1	-	-	-	3	9	-	-	4	1	-	-
		F	18	1	-	-	1	4	9	-	-	2	1	-	-
A 30	Late effects of acute poliomyelitis and acute infectious encephalitis	T	31	-	-	5	1	8	9	4	3	-	1	-	-
		M	20	-	-	2	1	5	5	3	3	-	1	-	-
		F	11	-	-	3	-	3	4	1	-	-	-	-	-
A 31	Smallpox	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 32	Measles	T	45	-	-	-	2	10	10	7	6	6	3	-	1
		M	15	-	-	-	2	3	5	-	2	1	2	-	-
		F	30	-	-	-	-	7	5	7	4	5	1	-	1
A 33	Yellow fever	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 34	Infectious hepatitis	T	76	1	1	3	1	12	30	-	1	4	22	-	1
		M	42	1	1	1	-	10	18	-	-	2	8	-	1
		F	34	-	-	2	1	2	12	-	1	2	14	-	-
A 35	Rabies	T	1	-	-	-	-	-	1	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	1	-	-	-	-	-	-
A 36	Typhus and other ricket- tsial diseases	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 37	Malaria	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 38	Schistosomiasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 39	Hydatid disease	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	Filariasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	Ankylostomiasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	Other diseases due to helminths	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	All other diseases clas- sified as infective and parasitic	T	90	1	3	6	1	26	29	5	4	7	7	-	1
		M	44	-	2	4	-	13	14	3	-	2	6	-	-
		F	46	1	1	2	1	13	15	2	4	5	1	-	1
	II. NEOPLASMS	T	28,324	529	175	1,198	828	7,943	10,078	1,482	1,292	1,757	3,008	11	23
		M	15,674	301	87	642	434	4,300	5,535	850	750	1,015	1,738	9	13
		F	12,650	228	88	556	394	3,643	4,543	632	542	742	1,270	2	10
	All malignant neoplasms (A44-A59)	T	28,007	518	173	1,176	820	7,846	9,978	1,465	1,275	1,739	2,984	11	22
		M	15,515	296	86	632	429	4,248	5,484	842	742	1,006	1,728	9	13
		F	12,492	222	87	544	391	3,598	4,494	623	533	733	1,256	2	9
A 44	Malignant neoplasm of buccal cavity and pharynx	T	566	12	3	19	14	196	201	27	17	28	49	-	-
		M	433	8	3	15	10	171	144	18	11	21	32	-	-
		F	133	4	-	4	4	25	57	9	6	7	17	-	-
A 45	Malignant neoplasm of oesophagus	T	480	11	2	23	5	115	198	30	13	30	52	-	1
		M	352	9	-	17	3	89	146	19	10	22	36	-	1
		F	128	2	2	6	2	26	52	11	3	8	16	-	-
A 46	Malignant neoplasm of stomach	T	2,593	93	20	109	88	782	763	141	150	170	276	-	1
		M	1,704	58	15	79	43	505	503	92	100	115	193	-	1
		F	889	35	5	30	45	277	260	49	50	55	83	-	-
A 47	Malignant neoplasm of intestine, except rectum	T	3,301	57	19	171	110	953	1,199	163	122	190	315	-	2
		M	1,510	29	8	75	48	397	557	81	62	94	158	-	1
		F	1,791	28	11	96	62	556	642	82	60	96	157	-	1
A 48	Malignant neoplasm of rectum	T	1,235	23	8	43	35	330	479	53	51	82	128	2	1
		M	747	11	4	27	20	199	290	35	32	51	76	2	-
		F	488	12	4	16	15	131	189	18	19	31	52	-	1

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	NWT
A 49	Malignant neoplasm of larynx	T M F	227 203 24	7 7 -	2 2 -	11 10 1	6 6 -	80 67 13	78 71 7	9 8 1	7 6 1	15 15 -	12 11 1	- - -	- - -
A 50	Malignant neoplasm of trachea and of bronchus and lung not specified as secondary	T M F	4,318 3,700 618	73 58 15	17 14 3	179 148 31	90 82 8	1,100 934 166	1,641 1,430 211	250 213 37	165 141 24	251 209 42	537 461 76	6 4 2	9 6 3
A 51	Malignant neoplasm of breast	T M F	2,664 19 2,645	31 - 31	16 1 15	100 - 100	85 - 85	780 5 775	979 9 970	123 1 122	101 - 101	156 1 155	290 2 288	- - -	3 - 3
A 52	Malignant neoplasm of cervix uteri	F	652	16	2	40	24	204	247	18	18	31	51	-	1
A 53	Malignant neoplasm of other and unspecified parts of uterus	F	445	5	5	10	12	174	154	33	13	18	21	-	-
A 54	Malignant neoplasm of prostate	M	1,456	13	8	61	47	390	456	88	99	99	194	1	-
A 55	Malignant neoplasm of skin	T M F	371 222 149	2 2 -	- - -	18 11 7	15 7 8	101 61 40	141 92 49	18 9 9	22 12 10	20 14 6	34 14 20	- - -	- - -
A 56	Malignant neoplasm of bone and connective tissue	T M F	295 170 125	6 1 5	2 - 2	13 9 4	10 3 7	100 59 41	88 61 27	9 3 6	13 7 6	20 10 10	34 17 17	- - -	- - -
A 57	Malignant neoplasm of all other and unspecified sites	T M F	6,813 3,468 3,345	132 75 57	55 27 28	293 133 160	207 117 90	1,824 928 896	2,438 1,219 1,219	354 186 168	356 185 171	449 236 213	700 357 343	2 2 -	3 3 -
a.	Other digestive organs (155-159)	T M F	2,615 1,405 1,210	42 26 16	21 9 12	111 52 59	78 53 25	737 387 350	905 478 427	136 71 65	126 62 64	166 96 70	290 168 122	1 1 -	2 2 -
b.	Other respiratory organs (160, 164, 165)	T M F	135 95 40	2 2 -	- - -	7 4 3	1 - 1	32 27 5	63 38 25	10 8 2	8 6 2	3 3 -	9 7 2	- - -	- - -
c.	Urinary organs (180, 181)	T M F	1,384 962 422	26 19 7	15 11 4	58 34 24	46 39 7	344 245 99	534 362 172	79 58 21	58 45 13	95 68 27	129 81 48	- - -	- - -
d.	Brain and other parts of nervous system (193)	T M F	781 464 317	16 10 6	6 4 2	21 12 9	25 11 14	235 137 98	254 150 104	38 24 14	51 31 20	52 33 19	82 51 31	- - -	1 1 -
e.	Other	T M F	1,898 542 1,356	46 18 28	13 3 10	96 31 65	57 14 43	476 132 344	682 191 491	91 25 66	113 41 72	133 36 97	190 50 140	1 1 -	- - -
A 58	Leukaemia and aleukaemia	T M F	1,213 702 511	19 12 7	6 3 3	36 25 11	34 22 12	330 195 135	437 232 205	70 44 26	59 34 25	87 56 31	135 79 56	- - -	- - -
A 59	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	T M F	1,378 829 549	18 13 5	8 1 7	50 22 28	38 21 17	387 248 139	479 274 205	79 45 34	69 43 26	93 63 30	156 98 58	- - -	1 1 -
a.	Hodgkin's disease (201)	T M F	345 227 118	6 6 -	2 1 1	12 5 7	9 4 5	106 70 36	108 66 42	15 7 8	15 11 4	26 19 7	46 38 8	- - -	- - -
b.	Other	T M F	1,033 602 431	12 7 5	6 - 6	38 17 21	29 17 12	281 178 103	371 208 163	64 38 26	54 32 22	67 44 23	110 60 50	- - -	1 1 -
A 60	Benign neoplasms and neoplasms of unspecified nature	T M F	317 159 158	11 5 6	2 1 1	22 10 12	8 5 3	97 52 45	100 51 49	17 8 9	17 8 9	18 9 9	24 10 14	- - -	1 - 1
	III, IV. ALLERGIC DISORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	T M F	4,133 1,957 2,176	69 39 30	20 6 14	214 90 124	146 59 87	1,441 671 770	1,313 629 684	166 73 93	209 115 94	261 141 120	289 131 158	- - -	5 3 2
A 61	Nontoxic goitre	T M F	10 1 9	- - -	- - -	- - -	- - -	6 1 5	- - -	- - -	1 - 1	- - -	2 - 2	- - -	1 - 1
A 62	Thyrotoxicosis with or without goitre	T M F	19 5 14	2 1 1	- - -	1 - 1	2 1 1	4 1 3	6 1 6	2 1 1	1 1 -	- - -	1 - 1	- - -	- - -
A 63	Diabetes mellitus	T M F	2,688 1,180 1,508	47 25 22	13 3 10	136 49 87	102 33 69	959 414 545	838 382 456	96 30 66	144 75 69	179 90 89	173 78 95	- - -	1 1 -
A 64	Avitaminosis and other deficiency states	T M F	68 34 34	2 2 -	- - -	6 1 5	3 2 1	10 4 6	25 11 14	5 3 2	2 1 1	3 3 -	10 5 5	- - -	2 2 -
A 65	Anaemias	T M F	354 175 179	6 5 1	2 1 1	13 6 7	10 9 1	119 51 68	130 62 68	17 11 6	19 10 9	17 11 6	21 9 12	- - -	- - -
A 66	Allergic disorders; all other endocrine, metabolic and blood diseases	T M F	994 562 432	12 6 6	5 2 3	58 34 24	29 14 15	343 200 143	314 174 140	46 28 18	42 28 14	62 37 25	82 39 43	- - -	1 - 1

DIVISION OF VITAL STATISTICS

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.		Sex	Canada	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	NWT
	V. MENTAL, PSYCHONEU- ROTIC, AND PERSONAL- ITY DISORDERS.	T	543	8	5	26	14	164	196	20	19	30	59	1	1
		M	343	3	4	18	9	94	132	8	10	24	40	-	1
		F	200	5	1	8	5	70	64	12	9	6	19	1	-
A 67	Psychoses	T	175	2	1	7	4	61	64	4	8	7	16	-	1
		M	92	-	1	4	3	30	29	2	6	4	12	-	1
		F	83	2	-	3	1	31	35	2	2	3	4	-	-
A 68	Psychoneuroses and disorders of personality	T	276	1	4	16	7	50	114	12	7	23	41	1	-
		M	208	-	3	12	5	37	95	5	3	20	28	-	-
		F	68	1	1	4	2	13	19	7	4	3	13	1	-
A 69	Mental deficiency	T	92	5	-	3	3	53	18	4	4	-	2	-	-
		M	43	3	-	2	1	27	8	1	1	-	-	-	-
		F	49	2	-	1	2	26	10	3	3	-	2	-	-
	VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	T	17,053	457	132	879	554	3,889	6,242	889	867	1,125	1,994	5	20
		M	8,422	242	65	429	250	1,917	3,027	477	468	600	932	4	11
		F	8,631	215	67	450	304	1,972	3,215	412	399	525	1,062	1	9
A 70	Vascular lesions affecting central nervous system	T	15,449	418	121	812	508	3,351	5,778	808	779	1,019	1,843	5	7
		M	7,551	226	59	397	225	1,611	2,784	434	410	549	848	4	4
		F	7,898	192	62	415	283	1,740	2,994	374	369	470	995	1	3
A 71	Nonmeningococcal meningitis	T	150	1	1	11	6	42	36	8	8	6	20	-	11
		M	85	-	1	6	3	22	20	4	6	3	13	-	7
		F	65	1	-	5	3	20	16	4	2	3	7	-	4
A 72	Multiple sclerosis	T	186	5	1	9	5	59	52	10	8	14	22	-	1
		M	69	2	1	5	2	26	16	3	3	4	7	-	-
		F	117	3	-	4	3	33	36	7	5	10	15	-	1
A 73	Epilepsy	T	220	5	1	6	8	81	55	7	22	19	15	-	1
		M	134	2	1	3	6	49	31	5	16	11	10	-	-
		F	86	3	-	3	2	32	24	2	6	8	5	-	1
A 74	Inflammatory diseases of eye	T	1	-	-	-	-	-	1	-	-	-	-	-	-
		M	1	-	-	-	-	-	1	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 75	Cataract	T	5	-	-	-	1	2	1	-	-	-	1	-	-
		M	4	-	-	-	-	2	1	-	-	-	1	-	-
		F	1	-	-	-	1	-	-	-	-	-	-	-	-
A 76	Glaucoma	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 77	Otitis media and mastoiditis	T	71	1	-	1	2	42	15	-	2	4	4	-	-
		M	49	1	-	1	-	28	11	-	1	3	4	-	-
		F	22	-	-	-	2	14	4	-	1	1	-	-	-
A 78	All other diseases of the nervous system and sense organs	T	971	27	8	40	24	312	304	56	48	63	89	-	-
		M	529	11	3	17	14	179	163	31	32	30	49	-	-
		F	442	16	5	23	10	133	141	25	16	33	40	-	-
	VII. DISEASES OF THE CIRCULATORY SYSTEM	T	59,975	1,003	444	2,656	2,066	14,689	23,329	3,001	2,918	3,350	6,482	19	18
		M	36,315	598	272	1,570	1,289	8,846	13,769	1,843	1,923	2,158	4,023	11	13
		F	23,660	405	172	1,086	777	5,843	9,560	1,158	995	1,192	2,459	8	5
A 79	Rheumatic fever	T	27	-	-	-	2	7	15	-	2	-	1	-	-
		M	12	-	-	-	1	4	4	-	2	-	1	-	-
		F	15	-	-	-	1	3	11	-	-	-	-	-	-
A 80	Chronic rheumatic heart disease	T	1,277	20	12	43	26	415	422	68	65	80	126	-	-
		M	538	7	7	18	13	166	193	28	33	26	47	-	-
		F	739	13	5	25	13	249	229	40	32	54	79	-	-
A 81	Arteriosclerotic and degenerative heart disease	T	48,548	749	344	2,089	1,695	11,628	19,455	2,361	2,129	2,663	5,406	16	13
		M	30,572	471	226	1,307	1,090	7,415	11,863	1,507	1,460	1,792	3,421	9	11
		F	17,976	278	118	782	605	4,213	7,592	854	669	871	1,985	7	2
A 82	Other diseases of heart	T	2,286	78	10	133	86	536	702	138	249	164	183	2	5
		M	1,238	34	2	70	52	280	371	71	167	92	96	1	2
		F	1,048	44	8	63	34	256	331	67	82	72	87	1	3
A 83	Hypertension with heart disease	T	2,187	53	29	85	69	789	705	71	117	70	199	-	-
		M	923	27	11	36	34	298	294	32	50	33	108	-	-
		F	1,264	26	18	49	35	491	411	39	67	37	91	-	-
A 84	Hypertension without mention of heart	T	654	15	16	28	26	206	200	38	26	46	53	-	-
		M	319	6	9	14	12	97	90	22	11	26	32	-	-
		F	335	9	7	14	14	109	110	16	15	20	21	-	-
A 85	Diseases of arteries	T	4,188	70	27	238	140	996	1,529	234	258	261	434	1	-
		M	2,279	43	13	106	74	534	803	132	157	149	267	1	-
		F	1,909	27	14	132	66	462	726	102	101	112	167	-	-
A 86	Other diseases of circu- latory system	T	808	18	6	40	22	112	301	91	72	66	80	-	-
		M	434	10	4	19	13	52	151	51	43	40	51	-	-
		F	374	8	2	21	9	60	150	40	29	26	29	-	-
	VIII. DISEASES OF THE RESPIRATORY SYSTEM	T	8,616	201	58	344	264	1,611	3,336	607	545	548	1,058	5	39
		M	5,622	126	37	218	148	1,074	2,151	376	363	356	750	3	20
		F	2,994	75	21	126	116	537	1,185	231	182	192	308	2	19
A 87	Acute upper respiratory infections	T	96	2	-	7	6	8	28	7	6	9	23	-	-
		M	61	2	-	6	5	2	14	5	4	6	17	-	-
		F	35	-	-	1	1	6	14	2	2	3	6	-	-
A 88	Influenza	T	263	8	5	8	9	94	84	6	12	12	23	-	2
		M	126	4	3	3	7	40	40	2	4	8	14	-	1
		F	137	4	2	5	2	54	44	4	8	4	9	-	1

TABLE 14
AGES ACCORDING TO THE INTERNATIONAL INTERVIEW
OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	NWT
A114	Other diseases of the genito-urinary system	T M F	374 213 161	8 4 4	2 2 -	15 12 3	15 7 8	155 82 73	110 63 47	17 12 5	11 7 4	17 6 11	23 18 5	- - -	1 - 1
	XI. DELIVERIES AND COM- PLICATIONS OF PREG- NANCY, CHILDBIRTH AND THE PUERPERIUM ¹	F	88	3	-	3	3	33	29	3	4	5	5	-	-
A115	Sepsis of pregnancy, child- birth and the puerperium ¹	F	14	-	-	-	-	6	8	-	-	-	-	-	-
A116	Toxaemias of pregnancy and the puerperium ¹	F	13	-	-	-	1	5	3	1	1	2	-	-	-
A117	Haemorrhage of pregnancy and childbirth ¹	F	18	1	-	-	-	6	5	-	1	2	3	-	-
A118	Abortion without mention of sepsis or toxæmia ¹	F	5	-	-	-	1	-	4	-	-	-	-	-	-
A119	Abortion with sepsis ¹	F	3	-	-	-	-	1	1	-	-	-	1	-	-
A120	Other complications of pregnancy, childbirth and the puerperium ¹	F	35	2	-	3	1	15	8	2	2	1	1	-	-
	XII, XIII. DISEASES OF THE SKIN AND MUSCULO- SKELETAL SYSTEM	T M F	635 285 350	4 2 2	1 1 -	29 13 16	25 10 15	210 90 120	229 107 122	36 13 23	18 9 9	41 20 21	41 19 22	1 1 -	- - -
A121	Infections of skin and subcutaneous tissue	T M F	45 26 19	1 - 1	- - -	3 1 2	2 - 2	5 3 2	21 14 7	3 2 1	- - -	5 2 3	5 4 1	- - -	- - -
A122	Arthritis and spondylitis	T M F	268 103 165	- - -	- - -	9 5 4	10 3 7	101 37 64	89 36 53	14 3 11	5 1 4	18 10 8	22 8 14	- - -	- - -
A123	Muscular rheumatism and rheumatism unspecified	T M F	4 1 3	- - -	- - -	- - -	- - -	1 - -	- - -	- - -	- - -	2 1 2	1 - -	- - -	- - -
A124	Osteomyelitis and periostitis	T M F	15 9 6	- - -	- - -	- - -	1 1 -	5 2 3	5 4 1	2 - 2	1 1 -	1 1 -	- - -	- - -	- - -
A125	Ankylosis and acquired musculoskeletal deformities	T M F	18 9 9	- - -	- - -	- - -	- - -	9 5 4	6 3 3	2 1 1	1 - 1	- - -	- - -	- - -	- - -
A126	All other diseases of skin and musculoskeletal system	T M F	285 137 148	3 2 1	1 1 -	17 7 10	12 6 6	89 43 46	108 50 58	15 7 8	11 7 4	15 7 8	13 6 7	1 1 -	- - -
	XIV. CONGENITAL MALFORMATIONS	T M F	2,128 1,122 1,006	73 34 39	18 8 10	85 52 33	56 31 25	752 390 362	673 344 329	83 49 34	83 48 35	149 88 61	152 76 76	- - -	4 2 2
A127	Spina bifida and mening- ocele	T M F	262 115 147	11 2 9	2 - 2	7 4 3	10 3 7	122 53 69	83 38 45	7 - 7	2 2 -	7 5 2	11 8 3	- - -	- - -
a.	Without hydrocephalus	T M F	107 46 61	6 1 5	1 - 1	2 - 2	3 1 2	57 23 34	26 12 14	3 - 3	- - -	3 3 -	6 4 2	- - -	- - -
b.	With hydrocephalus	T M F	155 69 86	5 1 4	1 - 1	5 2 3	7 2 5	65 30 35	57 26 31	4 - 4	2 2 -	4 2 2	5 4 1	- - -	- - -
A128	Congenital malformations of circulatory system	T M F	967 522 445	29 15 14	9 5 4	41 22 19	19 14 5	334 192 142	305 155 150	37 22 25	43 22 21	83 49 34	67 26 41	- - -	- - -
A129	All other congenital malformations	T M F	899 485 414	33 17 16	7 3 4	37 26 11	27 14 13	296 145 151	285 151 134	39 27 12	38 24 14	59 34 25	74 42 32	- - -	4 2 2
	XV. CERTAIN DISEASES OF EARLY INFANCY	T M F	4,731 2,742 1,989	222 129 93	29 18 11	192 111 81	191 110 81	1,331 766 565	1,495 879 616	192 111 81	270 158 112	374 208 166	399 231 168	6 2 4	30 19 11
A130	Birth injuries	T M F	769 458 311	26 17 9	6 5 1	22 8 14	30 14 16	257 158 99	249 152 97	37 23 14	37 19 18	43 23 20	57 35 22	1 1 -	4 3 1
A131	Postnatal asphyxia and atelectasis	T M F	896 520 376	21 11 10	3 3 -	33 21 12	17 9 8	274 159 115	320 183 137	27 15 12	35 22 13	76 44 32	84 51 33	1 1 1	5 2 3
A132	Infections of the newborn	T M F	307 166 141	19 13 6	1 - 1	9 4 5	17 11 6	80 41 39	105 59 46	14 7 13	19 6 3	10 7 3	26 14 12	1 1 1	6 4 2
A133	Haemolytic disease of newborn	T M F	149 86 63	7 4 3	- - -	4 3 1	4 3 1	61 36 25	45 36 20	2 2 -	9 3 6	9 5 4	8 5 3	- - -	- - -
¹ Per 100,000 live births															

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk-on	NWT
A134	All other defined diseases of early infancy	T	124	1	1	5	4	43	42	7	7	8	5	-	1
		M	72	-	-	4	4	22	30	3	5	2	1	-	1
		F	52	1	1	-	-	21	12	4	2	6	4	-	-
A135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	T	2,486	148	18	119	119	616	734	105	163	228	219	3	14
		M	1,440	84	10	71	69	350	430	61	103	127	125	1	9
		F	1,046	64	8	48	50	266	304	44	60	101	94	2	5
	XVI. SYMPTOMS, SENILITY, AND ILL-DEFINED CONDITIONS	T	977	103	8	31	29	191	199	46	52	277	36	-	5
		M	510	50	4	14	15	91	91	20	25	184	13	-	3
		F	467	53	4	17	14	100	108	26	27	93	23	-	2
A136	Senility without mention of psychosis	T	321	50	-	15	9	59	75	22	30	39	21	-	1
		M	120	23	-	6	3	25	20	8	11	18	5	-	1
		F	201	27	-	9	6	34	55	14	19	21	16	-	-
A137	Ill-defined and unknown causes	T	656	53	8	16	20	132	124	24	22	238	15	-	4
		M	390	27	4	8	12	66	71	12	14	166	8	-	2
		F	266	26	4	8	8	66	53	12	8	72	7	-	2
	EXVII. ACCIDENTS, POISONINGS AND VIOLENCE (Classification according to external cause)	T	13,761	276	97	600	444	3,569	4,637	675	709	1,029	1,660	22	43
		M	9,759	203	67	447	326	2,581	3,195	469	504	762	1,157	16	32
		F	4,002	73	30	153	118	988	1,442	206	205	267	503	6	11
AE138	Motor vehicle accidents	T	5,522	98	34	256	224	1,687	1,715	213	300	433	551	6	5
		M	3,992	68	21	196	160	1,224	1,244	152	213	328	377	5	4
		F	1,530	30	13	60	64	463	471	61	87	105	174	1	1
a.	Traffic accidents (810-825)	T	5,412	96	34	254	222	1,666	1,681	206	296	419	529	6	3
		M	3,900	67	21	194	158	1,206	1,216	145	209	317	360	5	2
		F	1,512	29	13	60	64	460	465	61	87	102	169	1	1
b.	Non-traffic accidents	T	110	2	-	2	2	21	34	7	4	14	22	-	2
		M	92	1	-	2	2	18	28	7	4	11	17	-	2
		F	18	1	-	-	-	3	6	-	-	3	5	-	-
AE139	Other transport accidents	T	604	30	13	61	24	94	181	45	22	30	95	-	9
		M	560	29	13	60	20	82	174	42	21	27	83	-	9
		F	44	1	-	1	4	12	7	3	1	3	12	-	-
a.	Drowning involving small boats (850)	T	272	20	3	27	8	37	99	15	8	5	47	-	3
		M	252	19	3	26	7	35	95	15	8	3	38	-	3
		F	20	1	-	1	1	2	4	-	-	2	9	-	-
b.	Drowning involving other watercraft (851)	T	48	2	10	22	-	1	4	1	-	-	8	-	-
		M	48	2	10	22	-	1	4	1	-	-	8	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
c.	Other transport	T	284	8	-	12	16	56	78	29	14	25	40	-	6
		M	260	8	-	12	13	46	75	26	13	24	37	-	6
		F	24	-	-	-	3	10	3	3	1	1	3	-	-
AE140	Accidental poisoning	T	484	3	2	13	11	79	163	20	19	42	131	-	1
		M	320	1	2	10	8	53	100	9	15	35	86	-	1
		F	164	2	-	3	3	26	63	11	4	7	45	-	-
AE141	Accidental falls	T	1,704	35	11	66	35	380	687	88	85	132	184	-	1
		M	865	16	4	25	17	214	332	42	48	71	95	-	1
		F	839	19	7	41	18	166	355	46	37	61	89	-	-
AE142	Accident caused by machinery	T	254	5	3	9	7	56	89	15	17	21	31	-	1
		M	238	4	3	9	7	54	81	13	16	20	30	-	1
		F	16	1	-	-	-	2	8	2	1	1	1	-	-
AE143	Accident caused by fire and explosion of combustible material	T	729	21	5	43	31	150	232	51	34	54	104	1	3
		M	441	15	3	22	21	88	128	31	23	36	70	1	3
		F	288	6	2	21	10	62	104	20	11	18	34	-	-
AE144	Accident caused by hot substance, corrosive liquid, steam, and radiation	T	39	2	-	2	3	9	10	3	1	3	6	-	-
		M	24	-	-	-	3	7	6	1	1	2	4	-	-
		F	15	2	-	2	-	2	4	2	-	1	2	-	-
AE145	Accident caused by firearm	T	155	6	-	2	8	41	33	14	15	14	16	3	3
		M	142	4	-	2	8	38	32	13	12	14	15	3	1
		F	13	2	-	-	-	3	1	1	3	-	1	-	2
AE146	Accidental drowning	T	880	38	10	42	27	305	230	40	23	57	100	2	6
		M	731	33	9	35	22	259	188	30	16	48	84	2	5
		F	149	5	1	7	5	46	42	10	7	9	16	-	1
AE147	All other accidental causes	T	1,225	28	8	40	38	298	425	74	93	69	136	4	12
		M	896	25	7	32	29	225	301	51	65	48	106	2	5
		F	329	3	1	8	9	73	124	23	28	21	30	2	7
	All accidental causes	T	11,596	266	86	534	408	3,099	3,765	563	609	855	1,354	16	41
		M	8,209	195	62	391	295	2,244	2,586	384	430	629	950	13	30
		F	3,387	71	24	143	113	855	1,179	179	179	226	404	3	11
AE148	Suicide	T	1,841	10	10	57	30	396	755	101	82	137	259	2	2
		M	1,353	8	5	50	25	294	538	80	62	110	177	2	2
		F	488	2	5	7	5	102	217	21	20	27	82	-	-
AE149	Homicide and injury purposely inflicted by other persons (not in war)	T	316	-	1	8	6	74	113	10	18	37	45	4	-
		M	189	-	-	5	6	43	67	4	12	23	28	1	-
		F	127	-	1	3	-	31	46	6	6	14	17	3	-
AE150	Injury resulting from operations of war	T	8	-	-	1	-	-	4	1	-	-	2	-	-
		M	8	-	-	1	-	-	4	1	-	-	2	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-

DIVISION OF VITAL STATISTICS

TABLE 14
DEATHS AT ALL AGES ACCORDING TO THE INTERNATIONAL INTERMEDIATE LIST
OF 150 CAUSES, CANADA, 1967 (Concluded)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yuk- on	NWT
	NXVII. ACCIDENTS, POIS- ONINGS AND VIOLENCE (Classification according to nature of injury)	T	13,761	276	97	600	444	3,569	4,637	675	709	1,029	1,660	22	43
		M	9,759	203	67	447	326	2,581	3,195	469	504	762	1,157	16	32
		F	4,002	73	30	153	118	988	1,442	206	205	267	503	6	11
AN138	Fracture of skull	T	3,007	39	10	116	112	1,076	926	99	109	167	346	2	5
		M	2,270	29	6	90	79	805	694	73	90	138	259	2	5
		F	737	10	4	26	33	271	232	26	19	29	87	-	-
AN139	Fracture of spine and trunk	T	689	22	8	36	21	162	212	52	43	52	79	1	1
		M	460	15	4	25	15	111	137	32	32	35	53	1	-
		F	229	7	4	11	6	51	75	20	11	17	26	-	1
AN140	Fracture of limbs	T	1,146	24	12	55	21	270	448	57	58	101	100	-	-
		M	457	5	4	17	6	128	172	21	24	46	34	-	-
		F	689	19	8	38	15	142	276	36	34	55	66	-	-
AN141	Dislocation without fracture	T	15	-	-	2	-	-	6	1	3	-	3	-	-
		M	11	-	-	1	-	-	5	1	1	-	3	-	-
		F	4	-	-	1	-	-	1	-	2	-	-	-	-
AN142	Sprains and strains of joints and adjacent muscles	T	2	-	-	-	-	-	1	-	-	1	-	-	-
		M	2	-	-	-	-	-	1	-	-	1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
AN143	Head injury (excluding fracture)	T	1,394	17	6	64	49	321	440	74	96	154	162	9	2
		M	1,077	14	3	51	34	244	328	61	73	127	135	5	2
		F	317	3	3	13	15	77	112	13	23	27	27	4	-
AN144	Internal injury of chest, abdomen, and pelvis	T	2,585	47	13	103	97	581	890	126	181	233	301	4	9
		M	2,011	37	12	89	80	456	693	99	133	187	214	4	7
		F	574	10	1	14	17	125	197	27	48	46	87	-	2
AN145	Laceration and open wounds	T	193	2	2	7	10	44	75	9	9	17	18	-	-
		M	158	2	2	6	8	36	61	7	8	14	14	-	-
		F	35	-	-	1	2	8	14	2	1	3	4	-	-
AN146	Superficial injury, contusion and crushing with intact skin surface	T	17	-	-	1	-	2	5	2	2	2	3	-	-
		M	9	-	-	1	-	1	4	-	2	-	1	-	-
		F	8	-	-	-	-	1	1	2	-	2	2	-	-
AN147	Effects of foreign body entering through orifice	T	432	13	3	13	10	91	186	29	30	20	30	1	6
		M	262	12	2	9	7	52	107	20	15	16	21	-	1
		F	170	1	1	4	3	39	79	9	15	4	9	1	5
AN148	Burns	T	634	18	4	35	24	147	214	35	27	52	75	-	3
		M	384	11	1	17	19	92	114	23	18	35	51	-	3
		F	250	7	3	18	5	55	100	12	9	17	24	-	-
AN149	Effects of poisons	T	1,272	13	4	38	26	242	463	69	55	105	255	1	1
		M	770	9	4	27	18	144	263	38	38	72	155	1	1
		F	502	4	-	11	8	98	200	31	17	33	100	-	-
AN150	All other and unspecified effects of external causes	T	2,375	81	35	130	74	633	771	122	96	125	288	4	16
		M	1,888	69	29	114	60	512	616	94	70	91	217	3	13
		F	487	12	6	16	14	121	155	28	26	34	71	1	3

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
	All Causes	T	736.5	623.4	952.3	876.9	789.4	658.9	767.6	792.2	776.7	639.1	830.5	486.7	748.3
		M	861.6	716.2	1,092.4	1,006.0	915.2	767.2	887.0	940.7	955.3	776.9	985.6	597.6	810.1
		F	610.2	526.4	808.6	746.3	662.2	551.0	648.4	642.5	590.0	496.2	671.3	352.9	674.2
	I. INFECTIVE AND PARASITIC DISEASES	T	5.5	6.0	4.6	7.5	5.6	7.0	4.4	5.7	5.2	4.8	4.9	-	31.0
		M	7.0	9.4	5.4	10.5	5.5	9.5	5.6	6.6	5.9	5.5	5.8	-	6.3
		F	4.0	2.5	3.7	4.5	5.8	4.5	3.2	4.8	4.5	4.0	4.0	-	60.6
A 1	Tuberculosis of respiratory system	T	3.0	3.0	-	4.1	3.9	5.1	1.8	2.7	1.9	2.1	1.8	-	17.2
		M	4.2	4.7	-	6.6	3.9	7.2	2.6	3.5	2.0	3.0	2.6	-	-
		F	1.8	1.2	-	1.6	3.9	2.9	1.0	1.9	1.7	1.1	0.9	-	37.9
a.	Active	T	2.3	2.4	-	2.6	3.1	4.5	1.1	1.6	0.4	1.9	1.2	-	13.8
		M	3.4	4.3	-	4.2	3.5	6.5	1.7	2.5	0.8	2.9	1.9	-	-
		F	1.3	0.4	-	1.1	2.6	2.6	0.6	0.6	-	0.8	0.5	-	30.3
b.	Inactive (002, 2, 008, 2)	T	0.7	0.6	-	1.5	0.8	0.5	0.7	1.1	1.5	0.2	0.6	-	3.4
		M	0.8	0.4	-	2.4	0.3	0.8	0.9	1.0	1.2	0.1	0.7	-	-
		F	0.5	0.8	-	0.5	1.3	0.3	0.4	1.3	1.7	0.3	0.4	-	7.6
A 2	Tuberculosis of meninges and central nervous system	T	*	-	-	0.1	-	0.1	*	0.1	0.1	-	-	-	3.4
		M	*	-	-	-	-	0.1	-	0.2	0.2	-	-	-	-
		F	*	-	-	-	-	-	-	-	-	-	-	-	-
A 3	Tuberculosis of intestines	T	*	-	-	0.3	-	*	0.1	-	-	-	-	-	7.6
		M	*	-	-	-	-	*	-	-	-	-	-	-	-
		F	*	-	-	-	-	-	-	0.2	-	-	-	-	-
A 4	Tuberculosis of bones and joints	T	*	-	-	-	-	*	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	*	-	-	-	-	*	-	-	-	-	-	-	-
A 5	Tuberculosis, all other forms	T	0.2	0.2	-	0.1	-	0.1	0.2	0.5	0.2	0.1	0.2	-	-
		M	0.2	0.4	-	-	-	*	0.2	0.8	0.4	0.1	0.2	-	-
		F	0.1	-	-	0.3	-	0.2	0.1	0.2	-	0.1	0.2	-	-
A 6	Congenital syphilis	T	*	-	-	-	-	*	-	-	-	-	-	-	-
		M	*	-	-	-	-	*	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 7	Early syphilis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 8	Tabes dorsalis	T	*	-	-	-	-	*	-	-	-	-	0.1	-	-
		M	*	-	-	-	-	*	-	-	-	-	0.1	-	-
		F	*	-	-	-	-	*	-	-	-	-	-	-	-
A 9	General paralysis of insane	T	*	0.2	-	-	-	0.1	0.1	-	-	-	0.1	-	-
		M	0.1	0.4	-	-	-	0.1	0.1	-	-	-	0.1	-	-
		F	*	-	-	-	-	*	-	-	-	-	-	-	-
A 10	All other syphilis	T	0.3	-	-	0.5	0.2	0.1	0.3	0.1	0.6	0.4	0.3	-	-
		M	0.4	-	-	1.1	-	0.2	0.5	0.2	0.8	0.8	0.3	-	-
		F	0.1	-	-	-	0.3	*	0.2	-	0.4	-	0.3	-	-
A 11	Gonococcal infection	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 12	Typhoid fever	T	*	-	-	-	-	-	-	-	0.1	-	-	-	-
		M	*	-	-	-	-	-	-	-	0.2	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 13	Paratyphoid fever and other Salmonella	T	*	-	-	-	-	*	-	-	-	-	0.1	-	-
		M	*	-	-	-	-	*	-	-	-	-	-	-	-
		F	*	-	-	-	-	*	0.1	-	-	-	0.1	-	-
A 14	Cholera	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 15	Brucellosis (undulant fever)	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 16	Dysentery, all forms	T	*	-	-	-	-	*	-	0.1	0.1	-	0.1	-	-
		M	*	-	-	-	-	-	-	0.2	-	-	0.1	-	-
		F	*	-	-	-	-	*	-	-	0.2	-	0.1	-	-
A 17	Scarlet fever	T	*	-	-	-	-	*	-	-	-	-	-	-	-
		M	*	-	-	-	-	*	-	-	-	-	-	-	-
		F	*	-	-	-	-	*	-	-	-	-	-	-	-
A 18	Streptococcal sore throat	T	*	-	-	0.1	-	*	-	-	-	-	0.1	-	-
		M	*	-	-	0.3	-	-	-	-	-	-	-	-	-
		F	*	-	-	-	-	*	-	-	-	-	0.1	-	-
A 19	Erysipelas	T	*	-	-	-	0.2	-	0.1	-	-	-	-	-	-
		M	*	-	-	-	0.3	-	*	-	-	-	-	-	-
		F	*	-	-	-	-	-	0.1	-	-	-	-	-	-
A 20	Septicaemia and pyaemia	T	0.2	0.6	0.9	0.4	-	0.1	0.3	0.3	0.4	0.3	0.1	-	-
		M	0.3	1.2	-	0.8	-	0.2	0.4	0.2	0.8	0.3	0.1	-	-
		F	0.1	-	1.9	-	-	0.1	0.2	0.4	-	0.3	0.1	-	-
A 21	Diphtheria	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 22	Whooping cough	T	0.1	0.2	-	-	-	0.1	0.1	-	0.2	0.2	0.1	-	-
		M	0.1	-	-	-	-	0.1	*	-	0.2	-	0.1	-	-
		F	0.1	0.4	-	-	-	0.1	0.1	-	0.2	0.4	-	-	-
A 23	Meningococcal infections	T	0.2	1.0	-	0.3	0.3	0.2	0.2	-	0.1	0.1	0.3	-	-
		M	0.2	2.0	-	-	0.3	0.2	0.2	-	0.2	0.1	0.2	-	-
		F	0.1	-	-	0.5	0.3	0.1	0.1	-	-	0.1	0.3	-	-

DIVISION OF VITAL STATISTICS

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
A 24	Plague	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 25	Leprosy	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 26	Tetanus	T	*	-	-	-	0.2	-	0.1	0.1	-	-	0.1	-	-
		M	*	-	-	-	-	-	0.1	0.2	-	-	0.1	-	-
		F	*	-	-	-	0.3	-	-	-	-	-	-	-	-
A 27	Anthrax	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	Acute poliomyelitis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 29	Acute infectious encephalitis	T	0.2	0.4	-	-	0.2	0.1	0.3	-	-	0.4	0.1	-	-
		M	0.2	0.4	-	-	-	0.1	0.3	-	-	0.5	0.1	-	-
		F	0.2	0.4	-	-	0.3	0.1	0.3	-	-	0.3	0.1	-	-
A 30	Late effects of acute polio- myelitis and acute infectious encephalitis	T	0.2	-	-	0.7	0.2	0.1	0.1	0.4	0.3	-	0.1	-	-
		M	0.2	-	-	0.5	0.3	0.2	0.1	0.6	0.6	-	0.1	-	-
		F	0.1	-	-	0.8	-	0.1	0.1	0.2	-	-	-	-	-
A 31	Smallpox	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 32	Measles	T	0.2	-	-	-	0.3	0.2	0.1	0.7	0.6	0.4	0.2	-	3.4
		M	0.1	-	-	-	0.6	0.1	0.1	-	0.4	0.1	0.2	-	-
		F	0.3	-	-	-	-	0.2	0.1	1.5	0.9	0.7	0.1	-	7.6
A 33	Yellow fever	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 34	Infectious hepatitis	T	0.4	0.2	0.9	0.4	0.2	0.2	0.4	-	0.1	0.3	1.1	-	3.4
		M	0.4	0.4	1.8	0.3	-	0.3	0.5	-	-	0.3	0.8	-	6.3
		F	0.3	-	-	0.5	0.3	0.1	0.3	-	0.2	0.3	1.5	-	-
A 35	Rabies	T	*	-	-	-	-	-	*	-	-	-	-	-	-
		M	*	-	-	-	-	-	*	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 36	Typhus and other ricketsial diseases	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 37	Malaria	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 38	Schistosomiasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 39	Hydatid disease	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	Filariasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	Ankylostomiasis	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	Other diseases due to helminths	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	All other diseases classified as infective and parasitic	T	0.3	0.2	2.8	0.8	0.2	0.4	0.4	0.5	0.4	0.5	0.4	-	3.4
		M	0.4	-	3.6	1.1	-	0.4	0.4	0.6	-	0.3	0.6	-	-
		F	0.5	0.4	1.9	0.5	0.3	0.4	0.4	0.4	0.9	0.7	0.1	-	7.6
	II. NEOPLASMS	T	138.8	105.8	160.6	158.3	133.5	135.4	141.0	153.9	134.9	117.9	154.5	73.3	79.3
		M	152.9	117.8	157.6	168.7	139.3	146.8	154.9	175.8	153.2	133.8	176.2	109.8	82.3
		F	124.5	93.3	163.6	147.7	127.7	124.0	127.0	131.8	115.7	101.5	132.2	29.4	75.8
	All malignant neoplasms (A44-A59)	T	137.3	103.6	158.7	155.4	132.3	133.7	139.6	152.1	133.1	116.7	153.3	73.3	75.9
		M	151.4	115.9	155.8	166.1	137.7	145.0	153.5	174.1	151.5	132.6	175.2	109.8	82.3
		F	123.0	90.8	161.7	144.5	126.7	122.4	125.7	130.0	113.8	100.2	130.7	29.4	68.2
A 44	Malignant neoplasm of buccal cavity and pharynx	T	2.8	2.4	2.8	2.5	2.3	3.3	2.8	2.8	1.8	1.9	2.5	-	-
		M	4.2	3.1	5.4	3.9	3.2	5.8	4.0	3.7	2.2	2.8	3.2	-	-
		F	1.3	1.6	-	1.1	1.3	0.9	1.6	1.9	1.3	1.0	1.8	-	-
A 45	Malignant neoplasm of oesophagus	T	2.4	2.2	1.8	3.0	0.8	2.0	2.8	3.1	1.4	2.0	2.7	-	3.4
		M	3.4	3.5	-	4.5	1.0	3.0	4.1	3.9	2.0	2.9	3.7	-	6.3
		F	1.3	0.8	3.7	1.6	0.6	0.9	1.5	2.3	0.6	1.1	1.7	-	-
A 46	Malignant neoplasm of stomach	T	12.7	18.6	18.3	14.4	14.2	13.3	10.7	14.6	15.7	11.4	14.2	-	3.4
		M	16.6	22.7	27.2	20.8	13.8	17.2	14.1	19.0	20.4	15.2	19.6	-	6.3
		F	8.8	14.3	9.3	8.0	14.6	9.4	7.3	10.2	10.7	7.5	8.6	-	-
A 47	Malignant neoplasm of intestine, except rectum	T	16.2	11.4	17.4	22.6	17.7	16.2	16.8	16.9	12.7	12.8	16.2	-	6.9
		M	14.7	11.4	14.5	19.7	15.4	13.6	15.6	16.7	12.7	12.4	16.0	-	6.3
		F	17.6	11.5	20.4	25.5	20.1	18.9	18.0	17.1	12.8	13.1	16.3	-	7.6
A 48	Malignant neoplasm of rectum	T	6.1	4.6	7.3	5.7	5.6	5.6	6.7	5.5	5.3	5.5	6.6	13.3	3.4
		M	7.3	4.3	7.2	7.1	6.4	6.8	8.1	7.2	6.5	6.7	7.7	24.4	-
		F	4.8	4.9	7.4	4.3	4.9	4.5	5.3	3.8	4.1	4.2	5.4	-	7.6

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
A 49	Malignant neoplasm of larynx	T	1.1	1.4	1.8	1.5	1.0	1.4	1.1	0.9	0.7	1.0	0.6	-	-
		M	2.0	2.7	3.6	2.6	1.9	2.3	2.0	1.7	1.2	2.0	1.1	-	-
		F	0.2	-	-	0.3	-	0.4	0.2	0.2	0.2	-	0.1	-	-
A 50	Malignant neoplasm of trachea and of bronchus and lung not specified as secondary	T	21.2	14.6	15.6	23.6	14.5	18.7	23.0	26.0	17.2	16.8	27.6	40.0	31.0
		M	36.1	22.7	25.4	38.9	26.3	31.9	40.0	44.0	28.8	27.5	46.7	48.8	38.0
		F	6.1	6.1	5.6	8.2	2.6	5.6	5.9	7.7	5.1	5.7	7.9	29.4	22.7
A 51	Malignant neoplasm of breast	T	13.1	6.2	14.7	13.2	13.7	13.3	13.7	12.8	10.5	10.5	14.9	-	10.3
		M	0.2	-	1.8	-	-	0.2	0.3	0.2	-	0.1	0.2	-	-
		F	26.0	12.7	27.9	26.6	27.6	26.4	27.1	25.4	21.6	21.2	30.0	-	22.7
A 52	Malignant neoplasm of cervix uteri	F	6.4	6.5	3.7	10.6	7.8	6.9	6.9	3.8	3.8	4.2	5.3	-	7.6
A 53	Malignant neoplasm of other and unspecified parts of uterus	F	4.4	2.0	9.3	2.7	3.9	5.9	4.3	6.9	2.8	2.5	2.2	-	-
A 54	Malignant neoplasm of	M	14.2	5.1	14.5	16.0	15.1	13.3	12.8	18.2	20.2	13.0	19.7	12.2	-
A 55	Malignant neoplasm of skin	T	1.8	0.4	-	2.4	2.4	1.7	2.0	1.9	2.3	1.3	1.7	-	-
		M	2.2	0.8	-	2.9	2.2	2.1	2.6	1.9	2.5	1.8	1.4	-	-
		F	1.5	-	-	1.9	2.6	1.4	1.4	1.9	2.1	0.8	2.1	-	-
A 56	Malignant neoplasm of bone and connective tissue	T	1.4	1.2	1.8	1.7	1.6	1.7	1.2	0.9	1.4	1.3	1.7	-	-
		M	1.7	0.4	-	2.4	1.0	2.0	1.7	0.6	1.4	1.3	1.7	-	-
		F	1.2	2.0	3.7	1.1	2.3	1.4	0.8	1.3	1.3	1.4	1.8	-	-
A 57	Malignant neoplasm of all other and unspecified sites	T	33.4	26.4	50.5	38.7	33.4	31.1	34.1	36.8	37.2	30.1	36.0	13.3	10.3
		M	33.8	29.4	48.9	34.9	37.6	31.7	34.1	38.5	37.8	31.1	36.2	24.4	19.0
		F	32.9	23.3	52.0	42.5	29.2	30.5	34.1	35.0	36.5	29.1	35.7	-	-
a.	Other digestive organs (155-159)	T	12.8	8.4	19.3	14.7	12.6	12.6	12.7	14.1	13.2	11.1	14.9	6.7	6.9
		M	13.7	10.2	16.3	13.7	17.0	13.2	13.4	14.7	12.7	12.7	17.0	12.2	12.7
		F	11.9	6.5	22.3	15.7	8.1	11.9	11.9	13.6	13.7	9.6	12.7	-	-
b.	Other respiratory organs (160, 164, 165)	T	0.7	0.4	-	0.9	0.2	0.5	0.9	1.0	0.8	0.2	0.5	-	-
		M	0.9	0.8	-	1.1	-	0.9	1.1	1.7	1.2	0.4	0.7	-	-
		F	0.4	-	-	0.8	0.3	0.2	0.7	0.4	0.4	-	0.2	-	-
c.	Urinary organs (180, 181)	T	6.8	5.2	13.8	7.7	7.4	5.9	7.5	8.2	6.1	6.4	6.6	-	-
		M	9.4	7.4	19.9	8.9	12.5	8.4	10.1	12.0	9.2	9.0	8.2	-	-
		F	4.2	2.9	7.4	6.4	2.3	3.4	4.8	4.4	2.8	3.7	5.0	-	-
d.	Brain and other parts of nervous system (193)	T	3.8	3.2	5.5	2.8	4.0	4.0	3.6	3.9	5.3	3.5	4.2	-	3.4
		M	4.5	3.9	7.2	3.2	3.5	4.7	4.2	5.0	6.3	4.3	5.2	-	6.3
		F	3.1	2.5	3.7	2.4	4.5	3.3	2.9	2.9	4.3	2.6	3.2	-	-
e.	Other	T	9.3	9.2	11.9	12.7	9.2	8.1	9.5	9.4	11.8	8.9	9.8	6.7	-
		M	5.3	7.0	5.4	8.1	4.5	4.5	5.3	5.2	8.4	4.7	5.1	12.2	-
		F	13.4	11.5	18.6	17.3	13.9	11.7	13.7	13.8	15.4	13.3	14.6	-	-
A 58	Leukaemia and aleukaemia	T	5.9	3.8	5.5	4.8	5.5	5.6	6.1	7.3	6.2	5.8	6.9	-	-
		M	6.9	4.7	5.4	6.6	7.1	6.7	6.5	9.1	6.9	7.4	8.0	-	-
		F	5.0	2.9	5.6	2.9	3.9	4.6	5.7	5.4	5.3	4.2	5.8	-	-
A 59	Lymphosarcoma and other neoplasms of lymphatic and haematopoietic system	T	6.8	3.6	7.3	6.6	6.1	6.6	6.7	8.2	7.2	6.2	8.0	-	3.4
		M	8.1	5.1	1.8	5.8	6.7	8.5	7.7	9.3	8.8	8.3	9.9	-	6.3
		F	5.4	2.0	13.0	7.4	5.5	4.7	5.7	7.1	5.6	4.1	6.0	-	-
a.	Hodgkin's disease (201)	T	1.7	1.2	1.8	1.6	1.5	1.8	1.5	1.6	1.6	1.7	2.4	-	-
		M	2.2	2.3	1.8	1.3	1.3	2.4	1.8	1.4	2.2	2.5	3.9	-	-
		F	1.2	-	1.9	1.9	1.6	1.2	1.2	1.7	0.9	1.0	0.8	-	-
b.	Other	T	5.1	2.4	5.5	5.0	4.7	4.8	5.2	6.6	5.6	4.5	5.6	-	3.4
		M	5.9	2.7	-	4.5	5.5	6.1	5.8	7.9	6.5	5.8	6.1	-	6.3
		F	4.2	2.0	11.2	5.6	3.9	3.5	4.6	5.4	4.7	3.1	5.2	-	-
A 60	Benign neoplasms and neoplasms of unspecified nature	T	1.6	2.2	1.8	2.9	1.3	1.7	1.4	1.8	1.8	1.2	1.2	-	3.4
		M	1.6	2.0	1.8	2.6	1.6	1.8	1.4	1.7	1.6	1.2	1.0	-	-
		F	1.6	2.5	1.9	3.2	1.0	1.5	1.4	1.9	1.9	1.2	1.5	-	7.6
	III, IV. ALLERGIC DIS- ORDERS AND ENDOCRINE METABOLIC AND BLOOD DISEASES	T	20.3	13.8	18.3	28.3	23.5	24.6	18.4	17.2	21.8	17.5	14.8	-	17.2
		M	19.1	15.3	10.9	23.6	18.9	22.9	17.6	15.1	23.5	18.6	13.3	-	19.0
		F	21.4	12.3	26.0	32.9	28.2	26.2	19.1	19.4	20.1	16.4	16.4	-	15.2
A 61	Nontoxic goitre	T	*	-	-	-	-	0.1	-	-	0.1	-	0.1	-	3.4
		M	*	-	-	-	-	*	-	-	-	-	-	-	-
		F	0.1	-	-	-	-	0.2	-	-	0.2	-	0.2	-	7.6
A 62	Thyrotoxicosis with or without goitre	T	0.1	0.4	-	0.1	0.3	0.1	0.1	0.2	0.1	-	0.1	-	-
		M	*	0.4	-	-	0.3	*	-	0.2	0.2	-	-	-	-
		F	0.1	0.4	-	0.3	0.3	0.1	0.2	0.2	-	-	0.1	-	-
A 63	Diabetes mellitus	T	13.2	9.4	11.9	18.0	16.5	16.3	11.7	10.0	15.0	12.0	8.9	-	3.4
		M	11.5	9.8	5.4	12.9	10.6	14.1	10.7	6.2	15.3	11.9	7.9	-	6.3
		F	14.8	9.0	18.6	23.1	22.4	18.5	12.8	13.8	14.7	12.2	9.9	-	-
A 64	Avitaminosis and other deficiency states	T	0.3	0.4	-	0.8	0.5	0.2	0.3	0.5	0.2	0.2	0.5	-	6.9
		M	0.3	0.8	-	0.3	0.6	0.1	0.3	0.6	0.2	0.4	0.5	-	12.7
		F	0.3	-	-	1.3	0.3	0.2	0.4	0.4	0.2	-	0.5	-	-
A 65	Anaemias	T	1.7	1.2	1.8	1.7	1.6	2.0	1.8	1.8	2.0	1.1	1.1	-	-
		M	1.7	2.0	1.8	1.6	2.9	1.7	1.7	2.3	2.0	1.4	0.9	-	-
		F	1.8	0.4	1.9	1.9	0.3	2.3	1.9	1.3	1.9	0.8	1.2	-	-
A 66	Allergic disorders; all other endocrine, metabolic and blood diseases	T	4.9	2.4	4.6	7.7	4.7	5.8	4.4	4.8	4.4	4.2	4.2	-	3.4
		M	5.5	2.3	3.6	8.9	4.5	6.8	4.9	5.8	5.7	4.9	4.0	-	-
		F	4.3	2.5	5.6	6.4	4.9	4.9	3.9	3.8	3.0	3.4	4.5	-	7.6

DIVISION OF VITAL STATISTICS

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
	V. MENTAL, PSYCHO- NEUROTIC, AND PERSONALITY DISORDERS	T	2.7	1.6	4.6	3.4	2.3	2.8	2.7	2.1	2.0	2.0	3.0	6.7	3.4
		M	3.3	1.2	7.2	4.7	2.9	3.2	3.7	1.7	2.0	3.2	4.1	-	6.3
		F	2.0	2.0	1.9	2.1	1.6	2.4	1.8	2.5	1.9	0.8	2.0	14.7	-
A 67	Psychoses	T	0.9	0.4	0.9	0.9	0.6	1.0	0.9	0.4	0.8	0.5	0.8	-	3.4
		M	0.9	-	1.8	1.1	1.0	1.0	0.8	0.4	1.2	0.5	1.2	-	6.3
		F	0.8	0.8	-	0.8	0.3	1.1	1.0	0.4	0.4	0.4	0.4	-	-
A 68	Psychoneuroses and disorders of personality	T	1.4	0.2	3.7	2.1	1.1	0.9	1.6	1.2	0.7	1.5	2.1	6.7	-
		M	2.0	-	5.4	3.2	1.6	1.3	2.7	1.0	0.6	2.6	2.8	-	-
		F	0.7	0.4	1.9	1.1	0.6	0.4	0.5	1.5	0.9	0.4	1.4	14.7	-
A 69	Mental deficiency	T	0.5	1.0	-	0.4	0.5	0.9	0.3	0.4	0.4	-	0.1	-	-
		M	0.4	1.2	-	0.5	0.3	0.9	0.2	0.2	0.2	-	-	-	-
		F	0.5	0.8	-	0.3	0.6	0.9	0.3	0.6	0.6	-	0.2	-	-
	VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS	T	83.6	91.4	121.1	116.1	89.4	66.3	87.3	92.3	90.5	75.5	102.4	33.3	69.0
		M	82.2	94.7	117.8	112.7	80.3	65.4	84.7	98.6	95.6	79.1	94.5	48.8	69.6
		F	85.0	87.9	124.5	119.6	98.5	67.1	89.9	85.9	85.2	71.8	110.5	14.7	68.2
A 70	Vascular lesions affecting central nervous system	T	75.7	83.6	111.0	107.3	81.9	57.1	80.8	83.9	81.3	68.4	94.7	33.3	24.1
		M	73.7	88.5	106.9	104.3	72.2	55.0	77.9	89.7	83.7	72.4	86.0	48.8	25.3
		F	77.8	78.5	115.2	110.3	91.7	59.2	83.7	78.0	78.8	64.3	103.6	14.7	22.7
A 71	Nonmeningococcal meningitis	T	0.7	0.2	0.9	1.5	1.0	0.7	0.5	0.8	0.8	0.4	1.0	-	37.9
		M	0.8	-	1.8	1.6	1.0	0.8	0.6	0.8	1.2	0.4	1.3	-	44.3
		F	0.6	0.4	-	1.3	1.0	0.7	0.4	0.8	0.4	0.4	0.7	-	30.3
A 72	Multiple sclerosis	T	0.9	1.0	0.9	1.2	0.8	1.0	0.7	1.0	0.8	0.9	1.1	-	3.4
		M	0.7	0.8	1.8	1.3	0.6	0.9	0.4	0.6	0.6	0.5	0.7	-	-
		F	1.2	1.2	-	1.1	1.0	1.1	1.0	1.5	1.1	1.4	1.6	-	7.6
A 73	Epilepsy	T	1.1	1.0	0.9	0.8	1.3	1.4	0.8	0.7	2.3	1.3	0.8	-	3.4
		M	1.3	0.8	1.8	0.8	1.9	1.7	0.9	1.0	3.3	1.4	1.0	-	-
		F	0.8	1.2	-	0.8	0.6	1.1	0.7	0.4	1.3	1.1	0.5	-	7.6
A 74	Inflammatory diseases of eye	T	*	-	-	-	-	-	*	-	-	-	-	-	-
		M	*	-	-	-	-	-	*	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 75	Cataract	T	*	-	-	-	0.2	*	*	-	-	-	0.1	-	-
		M	*	-	-	-	-	0.1	*	-	-	-	0.1	-	-
		F	*	-	-	-	0.3	-	-	-	-	-	-	-	-
A 76	Glaucoma	T	-	-	-	-	-	-	-	-	-	-	-	-	-
		M	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
A 77	Otitis media and mastoiditis	T	0.3	0.2	-	0.1	0.3	0.7	0.2	-	0.2	0.3	0.2	-	-
		M	0.5	0.4	-	0.3	-	1.0	0.3	-	0.2	0.4	0.4	-	-
		F	0.2	-	-	-	0.6	0.5	0.1	-	0.2	0.1	-	-	-
A 78	All other diseases of the nervous system and sense organs	T	4.8	5.4	7.3	5.3	3.9	5.3	4.3	5.8	5.0	4.2	4.6	-	-
		M	5.2	4.3	5.4	4.5	4.5	6.1	4.6	6.4	6.5	4.0	5.0	-	-
		F	4.4	6.5	9.3	6.1	3.2	4.5	3.9	5.2	3.4	4.5	4.2	-	-
	VII. DISEASES OF THE CIRCULATORY SYSTEM	T	293.9	200.6	407.3	350.9	333.2	250.3	326.3	311.6	304.6	224.8	332.9	126.7	62.1
		M	354.4	234.1	492.8	412.5	413.8	302.0	385.3	381.1	392.7	284.4	407.9	134.1	82.3
		F	232.9	165.6	319.7	288.5	251.9	198.8	267.4	241.6	212.5	163.0	255.9	117.6	37.9
A 79	Rheumatic fever	T	0.1	-	-	-	0.3	0.1	0.2	-	0.2	-	0.1	-	-
		M	0.1	-	-	-	0.3	0.1	0.1	-	0.4	-	0.1	-	-
		F	0.1	-	-	-	0.3	0.1	0.3	-	-	-	-	-	-
A 80	Chronic rheumatic heart disease	T	6.3	4.0	11.0	5.7	4.2	7.1	5.9	7.1	6.8	5.4	6.5	-	-
		M	5.2	2.7	12.7	4.7	4.2	5.7	5.4	5.8	6.7	3.4	4.8	-	-
		F	7.3	5.3	9.3	6.6	4.2	8.5	6.4	8.3	6.8	7.4	8.2	-	-
A 81	Arteriosclerotic and degenerative heart disease	T	237.9	149.8	315.6	276.0	273.4	198.2	272.1	245.2	222.2	178.7	277.7	106.7	44.8
		M	298.3	184.3	409.4	343.4	349.9	253.1	332.0	311.6	298.1	236.2	346.9	109.8	69.6
		F	177.0	113.7	219.3	207.8	196.1	143.4	212.3	178.1	142.9	119.1	206.6	102.9	15.2
A 82	Other diseases of heart	T	11.2	15.6	9.2	17.6	13.9	9.1	9.8	14.3	26.0	11.0	9.4	13.3	17.2
		M	12.1	13.3	3.6	18.4	16.7	9.6	10.4	14.7	34.1	12.1	9.7	12.2	12.7
		F	10.3	18.0	14.9	16.7	11.0	8.7	9.3	14.0	17.5	9.8	9.1	14.7	22.7
A 83	Hypertension with heart disease	T	10.7	10.6	0.3	11.2	11.1	13.4	9.9	7.4	12.2	4.7	10.2	-	-
		M	9.0	10.6	19.9	9.5	10.9	10.2	8.2	6.6	10.2	4.3	11.0	-	-
		F	12.4	10.6	33.5	13.0	11.3	16.7	11.5	8.1	14.3	5.1	9.5	-	-
A 84	Hypertension without mention of heart	T	3.2	3.0	14.7	3.7	4.2	3.5	2.8	3.9	2.7	3.1	2.7	-	-
		M	3.1	2.3	16.3	3.7	3.9	3.3	2.5	4.5	2.2	3.4	3.2	-	-
		F	3.3	3.7	13.0	3.7	4.5	3.7	3.1	3.3	3.2	2.7	2.2	-	-
A 85	Diseases of arteries	T	20.5	14.0	24.8	31.4	22.6	17.0	21.4	24.3	26.9	17.5	22.3	6.7	-
		M	22.2	16.8	23.6	27.9	23.8	18.2	22.5	27.3	32.1	19.6	27.1	12.2	-
		F	18.8	11.0	26.0	35.1	21.4	15.7	20.3	21.3	21.6	15.3	17.4	-	-
A 86	Other diseases of circulatory system	T	4.0	3.6	5.5	5.3	3.5	1.9	4.2	9.4	7.5	4.4	4.1	-	-
		M	4.2	3.9	7.2	5.0	4.2	1.8	4.2	10.5	8.8	5.3	5.2	-	-
		F	3.7	3.3	3.7	5.6	2.9	2.0	4.2	8.3	6.2	3.6	3.0	-	-
	VIII. DISEASES OF THE RESPIRATORY SYSTEM	T	42.2	40.2	53.2	45.4	42.6	27.5	46.7	63.0	56.9	36.8	54.3	33.3	134.5
		M	54.9	49.3	67.0	57.3	47.5	36.7	60.2	77.8	74.1	46.9	76.0	36.6	126.6
		F	29.5	30.7	39.0	33.5	37.6	18.3	33.1	48.2	38.9	26.3	32.1	29.4	143.9
A 87	Acute upper respiratory infections	T	0.5	0.4	-	0.9	1.0	0.1	0.4	0.7	0.6	0.6	1.2	-	-
		M	0.6	0.8	-	1.6	1.6	0.1	0.4	1.0	0.8	0.8	1.7	-	-
		F	0.3	-	-	0.3	0.3	0.2	0.4	0.4	0.4	0.4	0.6	-	-
A 88	Influenza	T	1.3	1.6	4.6	1.1	1.5	1.6	1.2	0.6	1.3	0.8	1.2	-	6.9
		M	1.2	1.6	5.4	0.8	2.2	1.4	1.1	0.4	0.8	1.1	1.4	-	6.3
		F	1.3	1.6	3.7	1.3	0.6	1.8	1.2	0.8	1.7	0.5	0.9	-	7.6

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
A 89	Lobar pneumonia	T	2.5	3.0	2.8	3.4	2.4	0.8	3.0	3.8	3.0	1.8	5.0	6.7	3.4
		M	3.2	3.1	1.8	3.9	2.9	1.0	3.9	5.2	3.5	2.0	6.8	12.2	6.3
		F	1.9	2.9	3.7	2.9	1.9	0.5	2.2	2.5	2.6	1.6	3.2	-	-
A 90	Bronchopneumonia	T	14.7	12.2	11.0	10.7	14.0	7.4	17.9	29.0	22.4	11.5	19.2	6.7	37.9
		M	16.7	13.7	12.7	11.8	14.8	8.8	19.3	32.3	27.6	12.7	24.7	12.2	31.6
		F	12.7	10.6	9.3	9.6	13.3	6.0	16.5	25.7	17.1	10.3	13.5	-	45.5
A 91	Primary atypical, other and unspecified pneumonia	T	7.0	11.8	16.5	10.0	8.9	3.2	7.8	10.0	8.5	6.8	9.3	13.3	55.2
		M	8.0	12.5	19.9	10.8	6.1	3.9	9.2	9.5	9.8	7.8	11.2	-	50.6
		F	6.1	11.0	13.0	9.3	11.7	2.6	6.4	10.4	7.0	5.7	7.4	29.4	60.6
A 92	Acute bronchitis	T	0.4	0.8	-	0.9	0.5	0.4	0.3	1.1	0.2	0.2	0.4	-	-
		M	0.5	1.2	-	0.8	0.6	0.3	0.5	1.0	0.2	0.3	0.5	-	-
		F	0.4	0.4	-	1.1	0.3	0.5	0.2	1.3	0.2	0.1	0.2	-	-
A 93	Bronchitis, chronic and unqualified	T	6.0	3.2	9.2	9.2	5.2	5.8	6.1	5.4	6.3	5.0	6.9	6.7	3.4
		M	10.0	5.5	10.9	14.5	6.4	9.5	10.6	9.3	10.0	8.0	11.4	12.2	6.3
		F	2.1	0.8	7.4	4.0	3.9	2.2	1.7	1.5	2.3	1.8	2.4	-	-
A 94	Hypertrophy of tonsils and adenoids	T	0.1	-	-	-	0.2	0.1	*	-	0.1	0.3	0.1	-	-
		M	0.1	-	-	-	0.3	0.1	0.1	-	0.2	0.3	-	-	-
		F	0.1	-	-	-	-	0.1	*	-	-	0.3	0.1	-	-
A 95	Empyema and abscess of lung	T	0.4	0.6	-	0.1	0.8	0.3	0.5	0.3	0.6	0.1	0.4	-	-
		M	0.5	0.8	-	0.3	1.0	0.3	0.7	0.2	0.8	0.3	0.6	-	-
		F	0.2	0.4	-	-	0.6	0.2	0.3	0.4	0.4	-	0.1	-	-
A 96	Pleurisy	T	0.2	0.2	-	0.3	0.2	0.4	0.3	0.1	0.1	0.3	-	-	-
		M	0.3	0.4	-	0.5	-	0.5	0.3	0.2	-	0.3	-	-	-
		F	0.2	-	-	-	0.3	0.2	0.2	-	0.2	0.4	-	-	-
A 97	All other respiratory diseases	T	9.0	6.4	9.2	8.7	8.1	7.4	9.1	11.9	13.8	9.4	10.7	-	27.6
		M	13.8	9.8	16.3	12.3	11.6	10.8	14.2	18.6	20.4	13.6	17.7	-	25.3
		F	4.3	2.9	1.9	5.0	4.5	3.9	4.0	5.2	6.8	5.1	3.5	-	30.3
	IX. DISEASES OF THE DIGESTIVE SYSTEM	T	27.5	18.2	29.4	26.9	24.2	26.7	28.2	27.4	29.7	24.4	32.7	13.3	41.4
		M	31.9	20.7	41.7	29.2	29.5	30.9	32.2	32.2	38.0	27.4	37.7	24.4	31.6
		F	23.2	15.5	16.7	24.7	18.8	22.5	24.1	22.5	21.1	21.2	27.5	-	53.0
A 98	Diseases of teeth and supporting structures	T	*	-	-	-	-	-	*	-	-	-	0.1	-	-
		M	*	-	-	-	-	-	*	-	-	-	0.1	-	-
		F	*	-	-	-	-	-	0.1						

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Continued)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
A114	Other diseases of genito- urinary system	T	1.8	1.6	1.8	2.0	2.4	2.6	1.5	1.8	1.1	1.1	1.2	-	3.4
		M	2.1	1.6	3.6	3.2	2.2	2.8	1.8	2.5	1.4	0.8	1.8	-	-
		F	1.6	1.6	-	0.8	2.6	2.5	1.3	1.0	0.9	1.5	0.5	-	7.6
	XI. DELIVERIES AND COMPLICATIONS OF PREG- NANCY, CHILDBIRTH AND THE PUERPERIUM ¹	F	23.7	23.4	-	21.0	24.3	32.5	22.7	17.5	22.2	16.3	15.2	-	-
A115	Sepsis of pregnancy, child- birth and the puerperium ¹	F	3.8	-	-	-	-	5.9	6.3	-	-	-	-	-	-
A116	Toxaemias of pregnancy and the puerperium ¹	F	3.5	-	-	-	8.1	4.9	2.4	5.8	5.6	6.5	-	-	-
A117	Haemorrhage of pregnancy and childbirth ¹	F	4.9	7.8	-	-	-	5.9	3.9	-	5.6	6.5	9.1	-	-
A118	Abortion without mention of sepsis or toxæmia ¹	F	1.3	-	-	-	8.1	-	3.1	-	-	-	-	-	-
A119	Abortion with sepsis ¹	F	0.8	-	-	-	-	1.0	0.8	-	-	-	3.0	-	-
A120	Other complications of pregnancy, childbirth and the puerperium ¹	F	9.4	15.6	-	21.0	8.1	14.8	6.3	11.6	11.1	3.3	3.0	-	-
	XII, XIII. DISEASES OF THE SKIN AND MUSCULO- SKELETAL SYSTEM	T	3.1	0.8	0.9	3.8	4.0	3.6	3.2	3.7	1.9	2.8	2.1	6.7	-
		M	2.8	0.8	1.8	3.4	3.2	3.1	3.0	2.7	1.8	2.6	1.9	12.2	-
		F	3.4	0.8	-	4.3	4.9	4.1	3.4	4.8	1.9	2.9	2.3	-	-
A121	Infections of skin and subcutaneous tissue	T	0.2	0.2	-	0.4	0.3	0.1	0.3	0.3	-	0.3	0.3	-	-
		M	0.3	-	-	0.3	-	0.1	0.4	0.4	-	0.3	0.4	-	-
		F	0.2	0.4	-	0.5	0.6	0.1	0.2	0.2	-	0.4	0.1	-	-
A122	Arthritis and spondylitis	T	1.3	-	-	1.2	1.6	1.7	1.2	1.5	0.5	1.2	1.1	-	-
		M	1.0	-	-	1.3	1.0	1.3	1.0	0.6	0.2	1.3	0.8	-	-
		F	1.6	-	-	1.1	2.3	2.2	1.5	2.3	0.9	1.1	1.5	-	-
A123	Muscular rheumatism and rheumatism unspecified	T	*	-	-	-	-	*	-	-	-	0.1	0.1	-	-
		M	*	-	-	-	-	-	-	-	-	-	0.1	-	-
		F	*	-	-	-	-	*	-	-	-	0.3	-	-	-
A124	Osteomyelitis and periostitis	T	0.1	-	-	-	0.2	0.1	0.1	0.2	0.1	0.1	-	-	-
		M	0.1	-	-	-	0.3	0.1	0.1	-	0.2	0.1	-	-	-
		F	0.1	-	-	-	-	0.1	*	0.4	-	-	-	-	-
A125	Ankylosis and acquired musculoskeletal deformities	T	0.1	-	-	-	-	0.2	0.1	0.2	0.1	-	-	-	-
		M	0.1	-	-	-	-	0.2	0.1	0.2	-	-	-	-	-
		F	0.1	-	-	-	-	0.1	0.1	0.2	0.2	-	-	-	-
A126	All other diseases of skin and musculoskeletal system	T	1.4	0.6	0.9	2.2	1.9	1.5	1.5	1.6	1.1	1.0	0.7	6.7	-
		M	1.3	0.8	1.8	1.8	1.9	1.5	1.4	1.4	1.4	0.9	0.6	12.2	-
		F	1.5	0.4	-	2.7	1.9	1.6	1.6	1.7	0.9	1.1	0.7	-	-
	XIV. CONGENITAL MALFORMATIONS	T	10.4	14.6	16.5	11.2	9.0	12.8	9.4	8.6	8.7	10.0	7.8	-	13.8
		M	10.9	13.3	14.5	13.7	10.0	13.3	9.6	10.1	9.8	11.6	7.7	-	12.7
		F	9.9	16.0	18.6	8.8	8.1	12.3	9.2	7.1	7.5	8.3	7.9	-	15.2
A127	Spina bifida and meningocele	T	1.3	2.2	1.8	0.9	1.6	2.1	1.2	0.7	0.2	0.5	0.6	-	-
		M	1.1	0.8	-	1.1	1.0	1.8	1.1	-	0.4	0.7	0.8	-	-
		F	1.4	3.7	3.7	0.8	2.3	2.3	1.3	1.5	-	0.3	0.3	-	-
a.	Without hydrocephalus	T	0.5	1.2	0.9	0.3	0.5	1.0	0.4	0.3	-	0.2	0.3	-	-
		M	0.4	0.4	-	0.5	0.3	0.8	0.3	-	-	0.4	0.4	-	-
		F	0.6	2.0	1.9	-	0.6	1.2	0.4	0.6	-	-	0.2	-	-
b.	With hydrocephalus	T	0.8	1.0	0.9	0.7	1.1	1.1	0.8	0.4	0.2	0.3	0.3	-	-
		M	0.7	0.4	-	0.5	0.6	1.0	0.7	-	0.4	0.3	0.4	-	-
		F	0.8	1.6	1.9	0.8	1.6	1.2	0.9	0.8	-	0.3	0.1	-	-
A128	Congenital malformations of circulatory system	T	4.7	5.8	8.3	5.4	3.1	5.7	4.3	3.8	4.5	5.6	3.4	-	-
		M	5.1	5.9	9.1	5.8	4.5	6.6	4.3	4.5	4.5	6.5	2.6	-	-
		F	4.4	5.1	7.4	5.0	1.6	4.8	4.2	3.1	4.5	4.6	4.3	-	-
A129	All other congenital malformations	T	4.4	6.6	6.4	4.9	4.4	5.0	4.0	4.0	4.0	4.0	3.8	-	13.8
		M	4.7	6.7	5.4	6.8	4.5	4.9	4.2	5.6	4.9	4.5	4.3	-	12.7
		F	4.1	6.5	7.4	2.9	4.2	5.1	3.7	2.5	3.0	3.4	3.3	-	15.2
	XV. CERTAIN DISEASES OF EARLY INFANCY	T	23.2	44.4	26.6	25.4	30.8	22.7	20.9	19.9	28.2	25.1	20.5	40.0	103.4
		M	26.8	50.5	32.6	29.2	35.3	26.1	24.6	23.0	32.3	27.4	23.4	24.4	120.3
		F	19.6	38.0	20.4	21.5	26.3	19.2	17.2	16.9	23.9	22.7	17.5	58.8	83.3
A130	Birth injuries	T	3.8	5.2	5.5	2.9	4.8	4.4	3.5	3.8	3.9	2.9	2.9	6.7	13.8
		M	4.5	6.7	9.1	2.1	4.5	5.4	4.3	4.8	3.9	3.0	3.5	12.2	19.0
		F	3.1	3.7	1.9	3.7	5.2	3.4	2.7	2.9	3.8	2.7	2.3	-	7.6
A131	Postnatal asphyxia and atelectasis	T	4.4	4.2	2.8	4.4	2.7	4.7	4.5	2.8	3.7	5.1	4.3	6.7	17.2
		M	5.1	4.3	5.4	5.5	2.9	5.4	5.1	3.1	4.5	5.8	5.2	-	12.7
		F	3.7	4.1	-	3.2	2.6	3.9	3.8	2.5	2.8	4.4	3.4	14.7	22.7
A132	Infections of the newborn	T	1.5	3.8	0.9	1.2	2.7	1.4	1.5	1.5	2.0	0.7	1.3	6.7	20.7
		M	1.6	5.1	-	1.1	3.5	1.4	1.7	1.4	1.2	0.9	1.4	-	25.3
		F	1.4	2.5	1.9	1.3	1.9	1.3	1.3	1.5	2.8	0.4	1.2	14.7	15.2
A133	Haemolytic disease of newborn	T	0.7	1.4	-	0.5	0.6	1.0	0.6	0.2	0.9	0.6	0.4	-	-
		M	0.8	1.6	-	0.8	1.0	1.2	0.7	0.4	0.6	0.7	0.5	-	-
		F	0.6	1.2	-	0.3	0.3	0.9	0.6	-	1.3	0.5	0.3	-	-
A134	All other defined diseases of early infancy	T	0.6	0.2	0.9	0.7	0.6	0.7	0.6	0.7	0.7	0.5	0.3	-	3.4
		M	0.7	-	-	1.1	1.3	0.8	0.8	0.6	1.0	0.3	0.1	-	6.3
		F	0.5	0.4	1.9	0.3	-	0.7	0.3	0.8	0.4	0.8	0.4	-	-

TABLE 15

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
A135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	T M F	12.2 14.1 10.3	29.6 32.9 26.2	16.5 18.1 14.9	15.7 18.7 12.8	19.2 22.2 16.2	10.5 11.9 9.1	10.3 12.0 8.5	10.9 12.6 9.2	17.0 21.0 12.8	15.3 16.7 13.8	11.2 12.7 9.8	20.0 12.2 29.4	48.3 57.0 37.9
	XVI. SYMPTOMS, SENILITY, AND ILL- DEFINED CONDITIONS	T M F	4.8 5.0 4.6	20.6 19.6 21.7	7.3 7.2 7.4	4.1 3.7 4.5	4.7 4.8 4.5	3.3 3.1 3.4	2.8 2.5 3.0	4.8 4.1 5.4	5.4 24.2 5.8	18.6 2.4 12.7	1.8 1.3 2.4	- - -	17.2 19.0 15.2
A136	Senility without mention of psychosis	T M F	1.6 1.2 2.0	10.0 9.0 11.0	- - -	2.0 1.6 2.4	1.5 1.0 1.9	1.0 0.9 1.2	1.0 0.6 1.5	2.3 1.7 2.9	3.1 2.2 4.1	2.6 2.4 2.9	1.1 0.5 1.7	- - -	3.4 6.1 -
A137	Ill-defined and unknown causes	T M F	3.2 3.8 2.6	10.6 10.6 10.6	7.3 7.2 7.4	2.1 2.1 2.1	3.2 3.9 2.6	2.2 2.3 2.2	1.7 2.5 1.5	2.2 2.5 2.5	2.3 2.9 1.7	16.0 21.9 9.8	0.8 0.8 0.7	- - -	13.8 12.7 15.2
	EXVII. ACCIDENTS, POIS- ONINGS AND VIOLENCE (Classification according to external cause)	T M F	67.4 95.2 39.4	55.2 79.5 29.9	89.0 121.4 55.8	79.3 117.4 40.6	71.6 104.7 38.2	68.1 88.1 33.6	64.9 89.4 40.3	70.1 97.0 43.0	74.0 102.9 43.8	69.1 100.4 36.5	85.3 117.3 52.4	146.7 195.1 88.2	148.3 202.5 83.3
AE138	Motor vehicle accidents	T M F	27.1 39.0 15.1	19.6 26.6 12.3	31.2 38.0 24.2	33.8 51.5 15.9	36.1 51.4 20.7	28.7 41.8 15.8	24.0 34.8 13.2	22.1 31.4 12.7	31.3 43.5 18.6	29.1 43.2 14.4	28.3 38.2 18.1	40.0 61.0 14.7	17.2 25.3 7.6
a.	Traffic accidents (810-825)	T M F	26.5 38.1 14.9	19.2 26.2 11.9	31.2 38.0 24.2	33.6 51.0 15.9	35.8 50.7 20.7	28.4 41.3 15.7	23.5 34.0 13.0	21.4 30.0 12.7	30.9 42.7 18.6	28.1 41.8 13.9	27.2 36.5 17.6	40.0 61.0 14.7	10.3 12.7 7.6
b.	Non-traffic accidents	T M F	0.5 0.9 0.2	0.4 0.4 0.4	- - -	0.3 0.5 -	0.3 0.6 -	0.4 0.6 0.1	0.5 0.8 0.2	0.7 1.4 -	0.4 0.8 -	0.9 1.4 0.4	1.1 1.7 0.5	- 12.7 -	6.9 -
AE139	Other transport accidents	T M F	3.0 5.5 0.4	6.0 11.4 0.4	11.9 23.6 -	8.1 15.8 0.3	3.9 6.4 1.3	1.6 2.8 0.4	2.5 4.9 0.2	4.7 8.7 0.6	2.3 4.3 0.2	2.0 3.6 0.4	4.9 8.4 1.2	- 57.0 -	31.0 -
a.	Drowning involving small boats (850)	T M F	1.3 2.5 0.2	4.0 7.4 0.4	2.8 5.4 -	3.6 6.8 0.3	1.3 2.2 0.3	0.6 1.2 0.1	1.4 2.7 0.1	1.6 3.1 -	0.8 1.6 -	0.3 0.4 0.3	2.4 3.9 0.9	- 19.0 -	10.3 -
b.	Drowning involving other watercraft (851)	T M F	0.2 0.5 -	0.4 0.8 -	9.2 18.1 -	2.9 5.8 -	- *	0.1 0.1 -	0.1 0.2 -	0.1 0.2 -	- -	- -	0.4 0.8 -	- -	-
c.	Other transport	T M F	1.4 2.5 0.2	1.6 3.1 -	- -	1.6 3.2 -	2.6 4.2 1.0	1.0 1.6 0.3	1.1 2.1 0.1	3.0 5.4 0.6	1.5 2.7 0.2	1.7 3.2 0.1	2.1 3.8 0.3	- 38.0 -	20.7 -
AE140	Accidental poisoning	T M F	2.4 3.1 1.6	0.6 0.4 0.8	1.8 3.6 -	1.7 2.6 0.8	1.8 2.6 1.0	1.3 1.8 0.9	2.3 2.8 1.8	2.1 2.0 2.3	2.0 4.1 0.9	2.8 4.6 1.0	6.7 8.7 4.7	- 6.3 -	3.4 -
AE141	Accidental falls	T M F	8.4 8.4 8.3	7.0 6.3 7.8	10.1 7.2 13.0	8.7 6.6 10.9	5.6 5.5 5.8	6.5 7.3 5.6	9.6 9.3 9.9	9.1 9.7 9.6	8.9 9.8 7.9	8.9 9.4 8.3	9.5 9.6 9.3	- 3.4 -	6.3 -
AE142	Accident caused by machinery	T M F	1.2 2.3 0.2	1.0 1.6 0.4	2.8 5.4 -	1.2 2.4 -	1.1 2.2 -	1.0 1.8 0.1	1.2 2.3 0.2	1.6 2.7 0.4					

DIVISION OF VITAL STATISTICS

TABLE 15
DEATH RATES PER 100,000 POPULATION AT ALL AGES ACCORDING TO THE INTERNATIONAL
INTERMEDIATE LIST OF 150 CAUSES, CANADA, 1967 (Concluded)

Int'l List No.	Cause of death (Intermediate list) (7th Rev.)	Sex	Canada	Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.	Yukon	NWT
	NXVII. ACCIDENTS, POIS- ONINGS AND VIOLENCE (Classification according to nature of injury)	T	67.4	55.2	89.0	79.3	71.6	60.8	64.9	70.1	74.0	69.1	85.3	146.7	148.3
		M	95.2	79.5	121.4	117.4	104.7	88.1	89.4	97.0	102.9	100.4	117.3	195.1	202.5
		F	39.4	29.9	55.8	40.6	38.2	33.6	40.3	43.0	43.8	36.5	52.4	88.2	83.3
AN138	Fracture of skull	T	14.7	7.8	9.2	15.3	18.1	18.3	13.0	10.3	11.4	11.2	17.8	13.3	17.2
		M	22.2	11.4	10.9	23.6	25.4	27.5	19.4	15.1	18.4	18.2	26.3	24.4	31.6
		F	7.3	4.1	7.4	6.9	10.7	9.2	6.5	5.4	4.1	4.0	9.1	-	-
AN139	Fracture of spine and trunk	T	3.4	4.4	7.3	4.8	3.4	2.8	3.0	5.4	4.5	3.5	4.1	6.7	3.4
		M	4.5	5.9	7.2	6.6	4.8	3.8	3.8	6.6	6.5	4.6	5.4	12.2	-
		F	2.3	2.9	7.4	2.9	1.9	1.7	2.1	4.2	2.3	2.3	2.7	-	7.6
AN140	Fracture of limbs	T	5.6	4.8	11.0	7.3	3.4	4.6	6.3	5.9	6.1	6.8	5.1	-	-
		M	4.5	2.0	7.2	4.5	1.9	4.4	4.8	4.3	4.9	6.1	3.4	-	-
		F	6.8	7.8	14.9	10.1	4.9	4.8	7.7	7.5	7.3	7.5	6.9	-	-
AN141	Dislocation without fracture	T	0.1	-	-	0.3	-	-	0.1	0.1	0.3	-	0.2	-	-
		M	0.1	-	-	0.3	-	-	0.1	0.2	0.2	-	0.3	-	-
		F	*	-	-	0.3	-	-	*	-	0.4	-	-	-	-
AN142	Sprains and strains of joints and adjacent muscles	T	*	-	-	-	-	-	*	-	-	0.1	-	-	-
		M	*	-	-	-	-	-	*	-	-	0.1	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-
AN143	Head injury (excluding fracture)	T	6.8	3.4	5.5	8.5	7.9	5.5	6.2	7.7	10.0	10.3	8.3	60.0	6.9
		M	10.5	5.5	5.4	13.4	10.9	8.3	9.2	12.6	14.9	16.7	13.7	61.0	12.7
		F	3.1	1.2	5.6	3.5	4.9	2.6	3.1	2.7	4.9	3.7	2.8	58.8	-
AN144	Internal injury of chest, abdomen, and pelvis	T	12.7	9.4	11.9	13.6	15.6	9.9	12.4	13.1	18.9	15.6	15.5	26.7	31.0
		M	19.6	14.5	21.7	23.4	25.7	15.6	19.4	20.5	27.2	24.6	21.7	48.8	44.3
		F	5.7	4.1	1.9	3.7	5.5	4.3	5.5	5.6	10.2	6.3	9.1	-	15.2
AN145	Laceration and open wounds	T	0.9	0.4	1.8	0.9	1.6	0.7	1.0	0.9	0.9	1.1	0.9	-	-
		M	1.5	0.8	3.6	1.6	2.6	1.2	1.7	1.4	1.6	1.8	1.4	-	-
		F	0.3	-	-	0.3	0.6	0.3	0.4	0.4	0.2	0.4	0.4	-	-
AN146	Superficial injury, con- tusion and crushing with intact skin surface	T	0.1	-	-	0.1	-	*	0.1	0.2	0.2	0.1	0.2	-	-
		M	0.1	-	-	0.3	-	*	0.1	-	0.4	-	0.1	-	-
		F	0.1	-	-	-	-	*	*	0.4	-	0.3	0.2	-	-
AN147	Effects of foreign body entering through orifice	T	2.1	2.6	2.8	1.7	1.6	1.6	2.6	3.0	3.1	1.3	1.5	6.7	20.7
		M	2.6	4.7	3.6	2.4	2.2	1.8	3.0	4.1	3.1	2.1	2.1	-	6.3
		F	1.7	0.4	1.9	1.1	1.0	1.3	2.2	1.9	3.2	0.5	0.9	14.7	37.9
AN148	Burns	T	3.1	3.6	3.7	4.6	3.9	2.5	3.0	3.6	2.8	3.5	3.9	-	10.3
		M	3.7	4.3	1.8	4.5	6.1	3.1	3.2	4.8	3.7	4.6	5.2	-	19.0
		F	2.5	2.9	5.6	4.8	1.6	1.9	2.8	2.5	1.9	2.3	2.5	-	-
AN149	Effects of poisons	T	6.2	2.6	3.7	5.0	4.2	4.1	6.5	7.2	5.7	7.0	13.1	6.7	3.4
		M	7.5	3.5	7.2	7.1	5.8	4.9	7.4	7.9	7.8	9.5	15.7	12.2	6.3
		F	4.9	1.6	-	2.9	2.6	3.3	5.6	6.5	3.6	4.5	10.4	-	-
AN150	All other and unspecified effects of external causes	T	11.6	16.2	32.1	17.2	11.9	10.8	10.8	12.7	10.0	8.4	14.8	26.7	55.2
		M	18.4	27.0	52.5	30.0	19.3	17.5	17.2	19.4	14.3	12.0	22.0	36.6	82.3
		F	4.8	4.9	11.2	4.3	4.5	4.1	4.3	5.8	5.6	4.6	7.4	14.7	22.7

* Less than 0.1 per 100,000 population

TABLE 16
CERTAIN CAUSES OF DEATH BY NUMBERS AND RATES FOR EACH YEAR OF THE LAST DECENNIAL PERIOD - 1967

Cause of death	1967		1966		1965		1964		1963		1962		1961		1960		1959		1958	
	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population	Number of deaths	Rate per 100,000 population
Diseases of the heart	2,977	199	3,028	207	3,001	206	2,995	208	2,890	205	2,818	205	2,710	203	2,800	218	2,581	204	2,431	202
Cancer	1,739	116	1,710	117	1,825	111	1,614	112	1,615	114	1,542	112	1,360	102	1,439	112	1,357	109	1,304	108
Diseases of the arteries	373	25	337	23	308	21	310	21	287	20	295	21	249	17	268	20	266	21	267	22
Violent deaths (suicide excepted)	892	59	844	57	815	56	845	58	786	55	734	53	722	54	713	55	679	54	708	58
Pneumonia (all forms)	299	20	419	28	368	25	403	28	388	27	388	28	386	28	335	26	346	7	338	28
Pulmonary tuberculosis	31	2	29	2	31	2	26	1	30	2	24	1	27	2	27	2	37	2	35	2
Influenza	12	-	80	5	19	1	12	-	68	4	45	3	17	1	28	2	36	2	21	1
Nephritis	52	3	64	4	50	3	52	3	56	3	67	4	60	4	54	4	49	3	59	4
Appendicitis	7	-	8	-	11	-	20	1	12	-	11	-	12	-	11	-	11	-	11	-
Suicides	137	9	146	10	160	11	157	11	107	7	116	8	129	9	119	9	117	9	111	9
Cerebral haemorrhage	1,019	68	1,052	72	1,031	71	899	62	993	70	957	69	1,008	75	934	72	952	76	930	77
Diabetes mellitus	179	12	151	10	139	9	156	11	110	7	146	10	134	10	144	11	136	10	119	9
Diarrhoea and enteritis	56	3	54	4	42	2	44	3	63	4	82	5	69	5	67	5	56	4	69	5
Puerperal causes	5	-	6	-	4	-	8	-	11	-	16	1	9	-	7	-	14	1	17	1
Whooping cough	3	-	-	-	-	-	2	-	2	-	1	-	1	-	3	-	5	-	2	-
Scarlet fever	-	-	-	-	1	-	-	-	-	-	-	-	1	-	1	-	1	-	-	-
Diphtheria	-	-	1	-	-	-	-	-	3	-	-	-	-	-	1	-	1	-	-	-
Typhoid and paratyphoid	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	-
Measles	6	-	4	-	6	-	9	-	10	-	5	-	4	-	6	-	3	-	4	-
Poliomyelitis and infectious encephalitis	-	-	5	-	7	-	3	-	4	-	5	-	7	-	16	1	14	1	8	-

[illegible]

TABLE 17
DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	<1 yr	1	2	3	4	5 - 11	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80 - 84	85 & +	NS
A 20	SEPTICAEMIA AND PYAEMIA ...	M - F 1 T 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 21	DIPHTHERIA	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 22	WHOOPING COUGH	M - F 2 T 2	- - -	- 2 2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 23	MENINGOCOCCAL INFECTIONS ..	M - F 1 T 1	- - -	- - -	- - -	- - -	- - -	- - 1	- - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 24	PLAGUE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 25	LEPROSY	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 26	TETANUS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 27	ANTHRAX	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 28	ACUTE POLIOMYELITIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 29	ACUTE ENCEPHALITIS	M 1 F - T 1	- - -	- - -	- - -	- - -	- - -	1 - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 30	LATE EFFECTS OF POLIO- MYELITIS AND ENCEPHALITIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 31	SMALLPOX	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 32	MEASLES	M 1 F 2 T 3	1 1 2	- - -	- - -	1 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 33	YELLOW FEVER	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 34	INFECTIOUS HEPATITIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 35	RABIES	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 36	TYPHUS AND OTHER RICKETT- SIAL DISEASES	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 37	MALARIA	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 38	SCHISTOSOMIASIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 39	HYDATID DISEASE	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 40	FILARIASIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 41	ANKYLOSTOMIASIS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 42	OTHER DISEASES DUE TO HELMINTHS	M - F - T -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
A 43	OTHER	M - F 1 T 1	- 1 1	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -
TOTAL (A1-A43)		M 10 F 12 T 22	2 3 5	- - -	- - 1	- - 1	- 1 2	- 1 1	- - -	- - -	- - -	- - -	- 1 1	- 1 1	- 2 2	- 1 1	- - -	- - -	- 1 1	- 1 1	2 2 3	2 1 3	- - -	- 1 1	- - -

DIVISION OF VITAL STATISTICS

TABLE 17

DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

[illegible]

TABLE 17
DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST # (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	NS	
								9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84			
	TOTAL (A44-A60).....	M 9	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	2	3	1	-	-	
		F 7	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	2	1	1	-	1	1	-	-	
		T 16	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1	2	1	2	2	4	2	-	-	
III, IV. ALLERGIC, ENDOCRINE METABOLIC AND BLOOD DISEASES																										
A 61	NON-TOXIC GOITRE	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 62	THYROTOXICOSIS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 63	DIABETES MELLITUS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
A 64	NUTRITIONAL DEFICIENCY STATES	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 65	ANAEMIAS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	
A 66	OTHER	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A61-A66).....	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	
		T 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	-	
V. MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.																										
A 67	PSYCHOSES	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
		T 1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
A 68	PSYCHONEUROTIC AND PERSONA- LITY DISORDERS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
		T 2	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	
A 69	MENTAL DEFICIENCY	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A67-A69).....	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 1	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	-	-	-	-	-	-	
		T 3	-	-	-	-	-	-	-	-	1	-	-	1	-	-	-	1	-	-	-	-	-	-	-	
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																										
A 70	CEREBROVASCULAR LESIONS ...	M 10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	4	1	1	-	
		F 8	1	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	1	1	1	-	-	1	-	
		T 18	1	-	-	-	-	-	-	-	-	-	-	2	-	-	1	-	1	3	3	4	1	2	-	
A 71	NON-MENINGOCOCCAL MENINGITIS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F 1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T 1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 72	MULTIPLE SCLEROSIS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 73	EPILEPSY	M 1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T 1	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 74	INFLAMMATORY DISEASES OF THE EYE	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 75	CATARACT	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 76	GLAUCOMA	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 77	OTITIS MEDIA AND MASTOIDITIS	M -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A 78	OTHER	M 1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
		F 3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	
		T 4	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	1	-	
	TOTAL (A70-A78).....	M 12	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	2	2	4	1	1	-	-	
		F 12	2	-	-	1	-	-	-	-	-	-	-	2	-	-	1	-	1	1	1	-	1	2	-	
		T 24	2	-	-	1	-	1	-	-	-	-	-	2	1	-	1	-	1	3	3	4	2	3	-	

TABLE 17

DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST (SEVENTH REVISION)	TOTAL	DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967																								85+	NS
			-1 YR	1	2	3	4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84					
A 97	OTHER	M 1 F 2 T 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-			
	TOTAL (A87-A97)	M 17 F 25 T 42	6	1	2	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	2	3	-			
IX. DISEASES OF THE DIGESTIVE SYSTEM.																												
A 98	DISEASES OF THE TEETH	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 99	ULCER OF THE STOMACH	M - F 1 T 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 100	ULCER OF THE DUODENUM	M 1 F 1 T 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
A 101	GASTRITIS AND DUODENITIS ..	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
A 102	APPENDICITIS	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 103	INTESTINAL OBSTRUCTION AND HERNIA	M 2 F 1 T 3	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-	-			
A 104	GASTRO-ENTERITIS AND COLITIS	M 3 F 8 T 11	2	7	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-			
A 105	CIRRHOSIS OF LIVER	M - F 5 T 5	-	-	-	-	-	-	1	-	1	2	-	-	1	-	-	-	-	-	-	-	-	-	-			
A 106	CHOLELITHIASIS AND CHOLECY- STITIS	M 1 F 2 T 3	-	-	-	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	1	-	-	-			
A 107	OTHER	M 1 F - T 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-			
	TOTAL (A98-A107)	M 8 F 17 T 25	2	7	1	-	-	-	1	-	2	2	-	-	1	-	1	-	-	1	1	1	2	-	-			
X. DISEASES OF THE GENITO- URINARY SYSTEM.																												
A 108	ACUTE NEPHRITIS	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 109	CHRONIC AND OTHER NEPHRITIS	M 1 F 1 T 2	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-			
A 110	INFECTIONS OF KIDNEY	M 2 F 2 T 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-			
A 111	CALCULI	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 112	HYPERPLASIA OF PROSTATE	M 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-			
A 113	BREAST	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 114	OTHER	M - F - T -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	TOTAL (A108-A114)	M 4 F 3 T 7	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	1	1	1	2	-	-	-			
XI. COMPLICATIONS OF PREG- NANCY, CHILDBIRTH, AND PUERPERIUM.																												
A 115	SEPSIS	F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 116	TOXAEMIA	F 1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 117	HAEMORRHAGE	F 1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 118	ABORTION WITHOUT SEPSIS OR TOXAEMIA	F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 119	ABORTION WITH SEPSIS	F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 120	OTHER	F -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	TOTAL (A115-A120)	F 2	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	AGE																	NS
								10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85		
XII, XIII. DISEASES OF THE SKIN AND MUSCULOSKELETAL SYSTEM.																									
A 121	SKIN INFECTIONS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 122	ARTHRITIS AND SPONDYLITIS	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-			
A 123	RHEUMATISM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 124	OSTEOMYELITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 125	ANKYLOSIS AND ACQUIRED DEFORMITIES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 126	OTHER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TOTAL (A121-A126)		M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-			
XIV. CONGENITAL MALFORMATIONS.																									
A 127 SPINA BIFIDA AND MENINGOCELE.																									
A	WITHOUT HYDROCEPHALUS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
B	WITH HYDROCEPHALUS	M	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
TOTAL (A127)		M	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		T	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
A 128	CIRCULATORY SYSTEM	M	4	2</																					

TABLE 17

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	
								-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
								9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84	856 NS

XVII. ACCIDENTS, POISONINGS AND VIOLENCE.

EXVII. EXTERNAL CAUSE.

AE 138 MOTOR VEHICLE ACCIDENTS.

A	TRAFFIC (810-825)	M	25	-	-	-	-	-	1	1	6	2	2	3	2	3	3	-	-	1	-	1	-
		F	11	-	-	-	-	1	-	1	1	-	1	1	1	-	1	-	1	2	-	1	-
		T	36	-	-	-	-	1	1	2	7	2	3	4	3	3	4	-	1	3	-	1	1
B	NON-TRAFFIC	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (AE138)	M	25	-	-	-	-	-	1	1	6	2	2	3	2	3	3	-	-	1	-	1	-
		F	11	-	-	-	-	1	-	1	1	-	1	1	1	-	1	2	-	1	-	1	
		T	36	-	-	-	-	1	1	2	7	2	3	4	3	3	4	-	1	3	-	1	1

AE 139 OTHER TRANSPORT ACCIDENTS.

[illegible]

AE 140 ACCIDENTAL POISONING

[illegible]

AE 141 ACCIDENTAL FALLS

[illegible]

AE 142 ACCIDENT CAUSED BY
MACHINERY

[illegible]

AE 143 ACCIDENT CAUSED BY FIRE AND
EXPLOSION

H	4	-	1	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-
F	4	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	-	-	-	-
T	8	-	1	-	-	-	4	-	-	-	-	1	1	-	-	1	-	-	-	-

AE 144 OTHER ACCIDENTAL BURNS ...

[illegible]

AE 145 ACCIDENT CAUSED BY FIREARM

[illegible]

AE 146 ACCIDENTAL DROWNING

M	9	-	-	-	-	-	1	2	1	2	2	-	1	-	-	-	-	-	-	-	-	-	-
F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T	9	-	-	-	-	-	1	2	1	2	2	-	1	-	-	-	-	-	-	-	-	-	

AE 147 ALL OTHER ACCIDENTAL CAUSE

M	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-
F	8	4	-	-	-	-	-	1	1	1	-	1	-	-	-	-	-	-	-	-
T	11	5	-	-	-	-	-	2	1	1	1	-	1	-	-	-	-	-	-	-

TOTAL (AE138-AE147).

W	50	1	1	-	-	-	3	4	4	10	7	3	5	3	3	3	-	-	2	-	-	1	-	-
F	25	4	-	-	-	-	3	-	3	2	1	1	1	3	-	1	1	1	2	-	1	-	1	-
T	75	5	1	-	-	-	6	4	7	12	8	4	6	6	3	4	1	1	4	-	1	1	1	-

AE 148 SUICIDE

M	6	-	-	-	-	-	-	-	1	2	-	1	-	1	-	-	1	-	-	-	-	-	-
F	1	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
T	7	-	-	-	-	-	-	-	1	2	-	2	-	1	-	-	1	-	-	-	-	-	-

AE 149 HOMICIDE

M	6	-	-	-	-	-	-	-	-	1	-	-	-	1	2	1	-	-	-	1	-	-	-	-
F	3	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
T	9	-	-	-	-	-	-	-	-	1	1	1	1	1	2	1	-	-	-	1	-	-	-	-

AE 150 WAR INJURIES

[illegible]

TOTAL (AE138-AE150). .

[illegible]

DIVISION OF VITAL STATISTICS

TABLE 17
DEATHS OF INDIANS, BY CAUSE AND SEX, BY AGE, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST (SEVENTH REVISION)		TOTAL	-1 YR	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	NS
									9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84		
AN 141	DISLOCATION WITHOUT FRACTURE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 142	SPRAINS AND STRAINS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 143	OTHER HEAD INJURY	M	8	-	-	-	-	-	-	-	1	1	1	1	-	2	1	-	-	-	1	-	-	-	-	-
		F	2	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	10	-	-	-	-	-	-	-	2	2	2	2	-	2	1	-	-	-	1	-	-	-	-	-
AN 144	INTERNAL INJURY	M	13	-	-	-	-	-	-	-	1	2	-	-	2	2	2	2	-	-	1	1	-	-	-	-
		F	6	-	-	-	-	-	-	-	1	1	-	1	1	1	-	-	-	-	1	-	1	-	-	-
		T	19	-	-	-	-	-	-	-	2	3	-	2	3	3	2	2	-	-	2	1	1	-	-	-
AN 145	OPEN WOUNDS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
AN 146	SUPERFICIAL INJURY OR CONTUSION	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 147	FOREIGN BODY THROUGH ORIFICE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 148	BURNS	M	4	-	1	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
		F	4	-	-	-	-	-	2	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-
		T	8	-	1	-	-	-	4	-	-	-	-	-	1	1	-	1	-	1	-	-	-	-	-	-
AN 149	POISONINGS	M	3	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	-	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-
AN 150	OTHER	M	15	1	-	-	-	-	1	2	1	4	2	2	1	-	-	-	1	-	-	-	-	-	-	-
		F	8	2	-	-	-	-	-	-	2	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-
		T	23	3	-	-	-	-	1	2	3	5	3	4	1	-	-	-	1	-	-	-	-	-	-	-
TOTAL (AN138-AN150).			M 62	1	1	-	-	-	3	4	1	13	7	4	5	5	5	4	1	-	2	1	-	1	-	-
		F 29	4	-	-	-	-	-	3	-	1	2	2	3	2	3	-	1	1	1	2	-	1	-	1	-
		T 91	5	1	-	-	-	-	6	4	2	15	9	7	7	8	5	2	2	2	3	1	1	1	1	-
ALL CAUSES.			M 191	44	3	2	-	1	5	6	8	14	7	4	9	8	8	6	5	5	10	11	19	9	13	-
		F 157	51	1	1	2	-	-	4	1	5	5	4	8	8	7	2	4	4	7	6	2	12	8	13	-
		T 348	95	5	3	2	1	1	9	7	13	19	11	12	17	15	10	10	11	12	16	13	31	17	26	-

TABLE 18
DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

LIST NO.	A	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	NS	
									9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84			
I. INFECTIVE AND PARASITIC DISEASES.																											
TUBERCULOSIS (A1-A5).																											
A	1	RESPIRATORY.																									
A	ACTIVE	M	6	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	2	-	-	-	
		F	2	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	
		T	8	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	2	2	-	1	-	
B	INACTIVE (002.2, 008.2) ..	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A1).	M	6	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	2	-	-	-	
		F	3	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	-	
		T	9	1	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	2	2	-	1	-	
A	2	MENINGES AND CENTRAL NERVOUS SYSTEM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	3	INTESTINE, PERITONEUM AND MESENTERY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	4	BONE AND JOINT	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	5	OTHER FORMS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (A1-A5).	M	6	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	2	2	-	-	-	
		F	3	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	-	
		T	9	1	-	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	2	2	-	1	-	
SYPHILIS (A6-A10).																											
A	6	CONGENITAL	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	7	EARLY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	8	TABES DORSALIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	9	GENERAL PARESIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	10	OTHERS	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
	TOTAL (A6-A10).	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
A	11	GONOCOCCAL INFECTION	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	12	TYPHOID	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	13	PARATYPHOID AND OTHER SALMONELLA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	14	CHOLERA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	15	BRUCELLOSIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	16	DYSENTERY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	17	SCARLET FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	18	STREPTOCOCCAL SORE THROAT	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
A	19	ERYSIPELAS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE 18
DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

LIST NO.	CAUSE OF DEATH INTERMEDIATE LIST (SEVENTH REVISION)	TOTAL	-1 VM	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	NS
A 20	SEPTICAEMIA AND PYAEMIA ...	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
A 21	DIPHTHERIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 22	WHOOPING COUGH	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 23	MENINGOCOCCAL INFECTIONS ..	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 24	PLAGUE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 25	LEPROSY	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 26	TETANUS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 27	ANTHRAX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 28	ACUTE POLIOMYELITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 29	ACUTE ENCEPHALITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 30	LATE EFFECTS OF POLIO- MYELITIS AND ENCEPHALITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 31	SMALLPOX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 32	MEASLES	M	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	2	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 33	YELLOW FEVER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 34	INFECTIOUS HEPATITIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 35	RABIES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 36	TYPHUS AND OTHER RICKETT- SIAL DISEASES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 37	MALARIA	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 38	SCHISTOSOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 39	HYDATID DISEASE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 40	FILARIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 41	ANKYLOSTOMIASIS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 42	OTHER DISEASES DUE TO HELMINTHS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 43	OTHER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL (A1-A43).	.....	M	17	5	-	-	1	-	1	-	-	-	-	-	1	2	1	-	-	1	2	2	-	-	-
		F	9	3	-	-	1	-	1	-	-	-	-	-	1	2	1	-	-	1	2	2	-	1	-

TABLE 18

DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5 9	10 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85 & 89	NS	
II. NEOPLASMS.																										
MALIGNANT NEOPLASMS (A44-A59)																										
■ 44	BUCCAL CAVITY AND PHARYNX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 45	ESOPHAGUS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 46	STOMACH	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
		T	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-
■ 47	INTESTINE, EXCEPT RECTUM ..	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-
A 48	RECTUM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 49	LARYNX	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
■ 50	TRACHEA, BRONCHUS, AND LUNG NOT SPECIFIED AS SECONDARY	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-
		T	2	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-	-	-
A 51	BREAST	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
■ 52	CERVIX UTERI	F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
A 53	UTERUS, OTHER PARTS	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A 54	PROSTATE	M	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-
A 55	SKIN	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
A 56	BONE AND CONNECTIVE TISSUE	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
■ 57	OTHER AND UNSPECIFIED SITES.																									
■	DIGESTIVE ORGANS	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(155-159)	F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
		T	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
B	RESPIRATORY ORGANS	■	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(160, 164, 165)	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
C	URINARY ORGANS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(180, 181)	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D	BRAIN AND NERVOUS SYSTEM	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	(193)	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E	OTHER	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

TABLE 18
DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5 9	10 14	15 19	20 24	25 29	30 34	35 39	40 44	45 49	50 54	55 59	60 64	65 69	70 74	75 79	80 84	85	NS	
III, IV. ALLERGIC, ENDOCRINE METABOLIC AND BLOOD DISEASES																										
A 61	NON-TOXIC GOITRE	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
■ 62	THYROTOXICOSIS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 63	DIABETES MELLITUS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 64	NUTRITIONAL DEFICIENCY STATES	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 65	ANAEMIAS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 66	OTHER	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
TOTAL (A61-A66)		M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
V. MENTAL, PSYCHONEUROTIC AND PERSONALITY DISORDERS.																										
A 67	PSYCHOSES	M F T	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 68	PSYCHONEUROTIC AND PERSONALITY DISORDERS	M F T	- 2 2	- - -	- - -	- - -	- - -	- - -	- - 1	- - 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 69	MENTAL DEFICIENCY	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
TOTAL (A67-A69)		M F T	- 3 3	- - -	- - -	- - -	- - -	- - -	- - 1	- - 1	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	
VI. DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS.																										
A 70	CEREBROVASCULAR LESIONS ...	M F T	7 5 12	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 2 2	- - -	- - -	- 1 1	- - -	- - -	1 - 1	1 1 2	3 - 3	1 - 1	1 - 1	- - -	
A 71	NON-MENINGOCOCCAL MENINGITIS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 72	MULTIPLE SCLEROSIS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 73	EPILEPSY	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 74	INFLAMMATORY DISEASES OF THE EYE	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
■ 75	CATARACT	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 76	GLAUCOMA	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 77	OTITIS MEDIA AND MASTOIDITIS	M F T	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	
A 78	OTHER	M F T	- 3 3	- 1 1	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- 1 1	- 1 1	
TOTAL (A70-A78)		M F T	7 ■ 15 15	- 2 2	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - -	- - 2 2	- - -	- - -	- - 1 1	- - -	- - -	1 - 1	1 - 2	3 - 3	1 - 2	1 1 2	- - -	

TABLE 18

[illegible]

DIVISION OF VITAL STATISTICS

TABLE 18

DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

[illegible]

DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

[illegible]

[illegible]

TABLE 18
DEATHS BY CAUSE AND SEX, BY AGE, REGISTERED INDIANS, ALBERTA, 1967

LIST A NO.	CAUSE OF DEATH INTERMEDIATE LIST A (SEVENTH REVISION)	TOTAL	-1 YR	1	2	3	4	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	NS
								9	14	19	24	29	34	39	44	49	54	59	64	69	74	79	84	89	94	NS
AN 141	DISLOCATION WITHOUT FRACTURE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 142	SPRAINS AND STRAINS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 143	OTHER HEAD INJURY	M	3	-	-	-	-	-	-	1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-
		F	1	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	4	-	-	-	-	-	-	1	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
AN 144	INTERNAL INJURY	M	9	-	-	-	-	-	-	1	2	-	-	1	2	2	-	-	-	1	-	-	-	-	-	-
		F	3	-	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-
		T	12	-	-	-	-	-	-	1	3	-	-	2	2	2	-	-	-	1	-	1	-	-	-	-
AN 145	OPEN WOUNDS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 146	SUPERFICIAL INJURY OR CONTUSION	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 147	FOREIGN BODY THROUGH ORIFICE	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AN 148	BURNS	M	2	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	3	-	-	-	-	2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
		T	5	-	1	-	-	3	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
AN 149	POISONINGS	M	3	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	3	-	-	-	-	-	-	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-
AN 150	OTHER	M	6	1	-	-	-	1	1	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		F	3	1	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
		T	9	2	-	-	-	1	1	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL (AN138-AN150).		M	33	1	1	-	-	2	1	3	8	5	2	1	4	2	1	-	-	1	-	-	1	-	-	-
		F	16	2	-	-	-	3	-	1	1	1	1	2	-	-	1	1	1	1	-	1	-	-	-	-
		T	49	3	1	-	-	5	1	4	9	6	3	3	4	2	2	1	1	2	-	1	1	-	-	-
ALL CAUSES.		M	115	30	2	2	-	1	2	2	4	8	5	2	1	6	3	1	2	3	4	8	15	6	11	-
		F	98	30	1	-	1	-	4	-	3	4	2	4	8	3	1	3	5	6	2	1	8	4	11	-
		T	213	60	3	2	1	1	6	2	7	12	7	6	9	9	4	4	7	9	6	9	23	10	16	-

TABLE 19

TABLE 19
SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, INDIANS, ALBERTA, 1967

INT L LIST NO.	CAUSE OF DEATH (SEVENTH REVISION)	TOTAL	NEONATAL											POST-NEONATAL										
			TOTAL 28 DAYS	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS	7-13 DAYS	14-20 DAYS	21-27 DAYS	TOTAL 28 DAYS -1 YEAR	2 MOS	3 MOS	4 MOS	5 MOS	6 MOS	7 MOS	8 MOS	9 MOS	10 MOS	11 MOS	
773	ILL-DEFINED DISEASES PECULIAR TO EARLY INFANCY.																							
.0	WITHOUT IMMATUREITY	M	7	2	1	-	-	-	1	-	-	-	5	1	1	2	1	-	-	-	-	-	-	
		F	3	1	1	-	-	-	-	-	-	-	2	-	-	-	1	1	-	-	-	-		
		T	10	3	2	-	-	-	1	-	-	-	7	1	1	2	2	1	-	-	-	-		
.5	WITH IMMATUREITY	M	8	8	5	2	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
		F	2	2	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	10	10	6	2	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
	TOTAL (773)	M	15	10	6	2	-	-	1	-	-	1	5	1	1	2	1	-	-	-	-	-		
		F	5	3	2	-	1	-	-	-	-	-	2	-	-	-	1	1	-	-	-	-		
		T	20	13	8	2	1	-	1	-	-	1	7	1	1	2	2	1	-	-	-	-		
774-776	IMMATUREITY	M	5	5	4	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
		F	7	7	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	12	12	10	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-		
	CLASS XV TOTAL	M	29	23	15	2	1	1	-	-	2	1	6	1	2	2	1	-	-	-	-	-		
		F	16	13	10	-	1	2	-	-	-	-	3	-	-	1	1	1	-	-	-	-		
		T	45	36	25	2	2	3	-	-	2	1	9	1	2	3	2	2	-	-	-	-		
XVI. ILL-DEFINED CONDITIONS.																								
795	ILL-DEFINED AND UNKNOWN CAUSES	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	OTHER OF 780-795	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	CLASS XVII TOTAL	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
XVII. ACCIDENTAL AND VIOLENT CAUSES.																								
E810-E825	MOTOR VEHICLE TRAFFIC ACCIDENTS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
E900-E904	ACCIDENTAL FALLS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
E916	FIRE ACCIDENTS	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
E921-E922	INHALATION AND INGESTION	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	2	2	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
E924-E925	MECHANICAL SUFFOCATION	M	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-		
		F	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		T	2	-	-	-	-	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-		
	OTHER OF E800-E999	M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		F	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-		
		T	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-		
	CLASS XVII TOTAL	M	1	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-		
		F	4	2	-	1	1	-	-	-	-	-	2	-	-	-	1	-	-	-	-	-		
		T	5	2	-	1	1	-	-	-	-	-	3	-	-	-	2	-	-	-	-	-		
	TOTAL ALL CAUSES	M	44	28	16	2	1	1	1	-	-	2	19	4	4	5	1	4	-	-	1	-		
		F	31	16	10	1	2	2	-	-	-	1	35	8	6	3	3	8	1	1	4	-		
		T	75	44	26	3	3	3	1	-	-	3	54	12	10	8	4	9	1	1	5	-		

TABLE 20

[illegible]

DIVISION OF VITAL STATISTICS

TABLE 20

SELECTED CAUSES OF INFANT DEATH BY SEX AND AGE AT DEATH, REGISTERED INDIANS, ALBERTA, 1967

INT. L. LIST NO.	CAUSE OF DEATH (SEVENTH REVISION) ILL-DEFINED DISEASES PECULIAR TO EARLY INFANCY.	TOTAL	NEONATAL											TOTAL 28 DAYS		POST-NEONATAL										
			-28 DAYS	-1 DAY	1 DAY	2 DAYS	3 DAYS	4 DAYS	5 DAYS	6 DAYS	7-13 DAYS	14-20 DAYS	21-27 DAYS	28 DAYS -1 YEAR	28 DAYS 2 MOS	3 MOS	4 MOS	5 MOS	6 MOS	7 MOS	8 MOS	9 MOS	10 MOS	11 MOS		
773	WITHOUT IMMATUREITY	H	30	11	6	1	1	1	-	-	-	-	1	19	6	4	2	6	1	1	-	-	-	1	-	
	F	26	17	10	3	3	-	-	-	-	-	-	1	9	4	1	1	2	1	-	-	-	-	-	-	
	T	56	28	16	4	4	1	1	-	-	-	-	2	28	10	5	3	8	2	1	-	-	-	1	-	
	WITH IMMATUREITY	H	38	38	17	8	4	3	2	1	2	-	1	-	-	-	-	-	-	-	-	-	-	-	-	
	F	28	28	19	2	3	1	1	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	
	T	66	66	36	10	7	4	4	1	2	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
	TOTAL (773)	H	68	49	23	9	5	4	3	1	2	-	1	19	6	4	2	6	1	1	-	-	-	1	-	
	F	54	45	29	5	6	1	1	-	-	1	1	1	9	4	1	1	2	1	-	-	-	-	-	-	
	T	122	94	52	14	11	5	4	1	2	1	2	2	28	10	5	3	8	2	1	-	-	-	1	-	
774-776	IMMATUREITY	H	59	58	47	4	2	2	-	1	1	-	1	1	-	1	-	-	-	-	-	-	-	-	-	
	F	47	46	34	4	2	2	1	3	-	-	-	1	1	-	1	-	-	-	-	-	-	-	-	-	
	T	106	104	81	8	4	4	3	4	1	-	1	-	2	-	1	1	-	-	-	-	-	-	-	-	
	CLASS XV TOTAL	H	167	122	21	19	8	8	2	4	3	2	2	21	6	5	3	4	1	1	-	-	-	1	-	
	F	166	152	103	16	13	5	8	4	1	3	1	1	14	7	2	2	2	1	-	-	-	-	-	-	
	T	374	339	225	39	32	13	7	6	5	6	3	3	35	13	7	5	6	2	1	-	-	-	1	-	
	XVI. ILL-DEFINED CONDITIONS.																									
795	ILL-DEFINED AND UNKNOWN	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CAUSES	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	OTHER OF 780-795	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	CLASS XVI TOTAL	H	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	XVII. ACCIDENTAL AND VIOLENT CAUSES.																									
E810-E825	MOTOR VEHICLE TRAFFIC	H	1	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	-	-	-	-	-	-	
	ACCIDENTS	F	2	-	-	-	-	-	-	-	-	-	-	2	-	1	-	1	-	-	-	-	-	-	-	
	T	3	-	-	-	-	-	-	-	-	-	-	-	3	-	1	1	1	-	-	-	-	-	-	-	
E900-E904	ACCIDENTAL FALLS	H	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-	
E916	FIRE ACCIDENTS	H	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	T	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	-	-	-	-	-	-	-	
E921-E922	INHALATION AND INGESTION	H	6	-	-	-	-	-	-	-	-	-	-	6	-	1	3	-	1	-	-	-	1	-	-	
	F	3	2	-	1	1	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	1	-	-	
	T	9	2	-	1	1	-	-	-	-	-	-	-	7	-	1	3	-	1	-	-	-	1	1	-	
E924-E925	MECHANICAL SUFFOCATION	H	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	F	5	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	1	-	-	-	-	-	-	
	T	7	-	-	-	-	-	-	-	-	-	-	-	7	2	1	-	-	2	-	-	-	-	-	1	
	OTHER OF E800-E999	H	2	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	1	-	
	F	2	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	1	-	-	-	-	-	-	
	T	4	-	-	-	-	-	-	-	-	-	-	-	4	1	-	-	-	1	-	-	-	-	1	-	
	CLASS XVII TOTAL	H	11	-	-	-	-	-	-	-	-	-	-	11	2	2	3	-	2	-	-	-	1	-	-	
	F	16	2	-	1	1	-	-	-	-	-	-	-	14	1	1	1	3	3	1	-	-	1	2	1	
	T	27	2	-	1	1	-	-	-	-	-	-	-	25	3	3	4	3	5	1	-	-	1	3	1	
	TOTAL ALL CAUSES	H	329	236	141	27	24	11	7	2	5	11	4	93	26	18	15	5	10	3	6	8	1	2	1	
	F	176	176	100	21	17	7	3	4	1	7	4	4	110	28	18	13	11	11	8	2	8	2	7	4	
	T	505	412	241	48	41	18	10	6	6	18	8	9	203	54	36	28	16	21	11	8	16	3	9	5	

DIVISION OF VITAL STATISTICS

TABLE 21
LIVE BIRTHS OF INDIANS BY MONTHS, ALBERTA, 1967

MONTHS												
Total	January	February	March	April	May	June	July	August	September	October	November	December
2,286	225	183	215	192	196	190	172	183	196	177	183	174

TABLE 22
LIVE BIRTHS OF REGISTERED INDIANS BY MONTHS, ALBERTA, 1967

MONTHS												
Total	January	February	March	April	May	June	July	August	September	October	November	December
1,263	130	101	102	108	125	113	96	105	101	108	85	89

TABLE 23
LEGITIMATE AND ILLEGITIMATE BIRTHS OF INDIANS
(EXCLUSIVE OF STILLBIRTHS) ALBERTA, 1967

Total Births			Legitimate			Illegitimate		
Total	Male	Female	Total	Male	Female	Total	Male	Female
2,286	1,125	1,161	1,345	646	699	941	479	462

TABLE 24
LEGITIMATE AND ILLEGITIMATE BIRTHS OF
REGISTERED INDIANS (EXCLUSIVE OF STILLBIRTHS) ALBERTA, 1967

Total Births			Legitimate			Illegitimate		
Total	Male	Female	Total	Male	Female	Total	Male	Female
1,263	621	642	687	334	353	576	287	289

TABLE 25
LIVE BIRTHS OF INDIANS BY AGE OF PARENTS, ALBERTA, 1967

Age of Mother (years)	AGE OF FATHER												Total Born to Married Mothers	Born to un- married Mothers	Born to all Mothers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & over	Not Stated			
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
14	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3
15	-	1	-	-	-	-	-	-	-	-	-	-	1	15	16
16	2	5	2	-	-	-	-	-	-	-	-	-	9	38	47
17	4	13	2	1	-	-	-	-	-	-	-	-	20	62	82
18	3	39	9	4	-	-	1	-	-	-	-	-	56	69	125
19	4	34	19	4	-	-	-	-	-	-	-	-	61	100	161
20	-	39	31	6	5	-	1	-	-	-	-	-	82	82	164
21	1	28	45	12	4	2	-	-	-	-	-	-	92	71	163
22	-	26	43	15	1	-	-	-	-	-	-	-	85	63	148
23	-	23	26	21	8	-	-	-	-	-	-	-	78	57	135
24	-	8	48	33	12	-	-	-	-	-	-	-	101	53	154
25	-	12	33	19	5	1	2	-	-	-	-	-	72	43	115
26	-	4	27	27	14	4	1	1	-	-	-	-	78	34	112
27	-	2	28	22	7	2	2	-	-	-	-	-	63	28	91
28	-	-	19	22	11	3	1	-	-	-	-	-	56	29	85
29	-	-	11	34	14	4	1	3	1	-	-	-	68	30	98
30	-	-	6	16	16	7	3	1	-	-	-	-	49	18	67
31	-	-	2	21	17	8	-	1	-	-	-	-	49	29	78
32	-	-	2	8	14	7	1	-	1	-	-	-	33	20	53
33	-	-	2	15	22	14	2	1	-	-	-	-	56	8	64
34	-	-	1	10	12	9	4	-	1	-	-	-	37	21	58
35	-	-	1	5	25	12	2	2	3	1	-	-	51	16	67
36	-	-	-	3	15	7	2	1	1	-	-	-	29	9	38
37	-	-	1	4	7	7	8	2	-	-	-	-	29	13	42
38	-	-	-	1	8	7	2	-	1	-	-	-	19	10	29
39	-	-	-	2	7	10	1	-	-	-	-	-	20	4	24
40	-	-	-	1	3	5	1	1	-	-	-	-	11	6	17
41	-	-	-	-	1	2	2	1	1	-	-	-	7	5	12
42	-	-	-	-	-	2	5	1	2	-	1	-	11	1	12
43	-	-	-	-	-	3	3	2	1	-	-	-	9	1	10
44	-	-	-	-	-	1	1	-	-	1	1	-	4	-	4
45	-	-	-	-	-	-	2	-	2	-	-	-	4	1	5
46	-	-	-	-	-	-	-	-	-	-	1	-	1	-	1
47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1
49	-	-	-	-	-	-	-	-	1	-	-	-	1	-	1
50 & over	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not Stated	-	-	-	-	1	-	-	-	-	-	-	1	2	1	3
Total Fathers	14	234	358	306	229	117	49	17	15	2	3	1	1,345	941	2,286

DIVISION OF VITAL STATISTICS

TABLE 26
LIVE BIRTHS OF REGISTERED INDIANS BY AGE OF PARENTS, ALBERTA, 1967

Age of Mother (years)	AGE OF FATHER												Total Born to Married Mothers	Born to Un- married Mothers	Born to all Mothers
	Under 20	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65 & over	Not Stated			
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-	8	8
16	-	1	1	-	-	-	-	-	-	-	-	-	2	28	30
17	3	6	2	-	-	-	-	-	-	-	-	-	11	42	53
18	-	15	4	1	-	-	1	-	-	-	-	-	21	35	56
19	3	11	9	-	-	-	-	-	-	-	-	-	23	61	84
20	-	15	16	2	2	-	1	-	-	-	-	-	36	54	90
21	1	13	20	3	4	-	-	-	-	-	-	-	41	44	85
22	-	10	24	7	1	-	-	-	-	-	-	-	42	46	88
23	-	12	17	10	4	-	-	-	-	-	-	-	43	37	80
24	-	3	26	13	5	-	-	-	-	-	-	-	47	29	76
25	-	7	16	13	2	-	1	-	-	-	-	-	39	23	62
26	-	1	11	15	4	1	-	-	-	-	-	-	32	21	53
27	-	1	16	11	2	1	-	-	-	-	-	-	31	14	45
28	-	-	6	15	6	2	-	-	-	-	-	-	29	21	50
29	-	-	7	16	9	3	-	3	-	-	-	-	38	21	59
30	-	-	2	10	11	5	1	1	-	-	-	-	30	9	39
31	-	-	1	11	11	4	-	-	-	-	-	-	27	17	44
32	-	-	1	6	8	3	-	-	1	-	-	-	19	10	29
33	-	-	2	8	14	9	1	-	-	-	-	-	34	3	37
34	-	-	1	6	5	4	2	-	1	-	-	-	19	13	32
35	-	-	1	3	15	8	1	-	1	-	-	-	29	8	37
36	-	-	-	3	7	6	1	-	-	-	-	-	17	6	23
37	-	-	-	1	5	1	2	2	-	-	-	-	11	10	21
38	-	-	-	1	7	4	1	-	1	-	-	-	14	4	18
39	-	-	-	-	7	9	1	-	-	-	-	-	17	3	20
40	-	-	-	-	3	4	-	1	-	-	-	-	8	2	10
41	-	-	-	-	1	1	1	1	1	-	-	-	5	4	9
42	-	-	-	-	-	1	4	-	2	-	1	-	8	1	9
43	-	-	-	-	-	3	3	-	1	-	-	-	7	-	7
44	-	-	-	-	-	-	1	-	-	1	1	-	3	-	3
45	-	-	-	-	-	-	1	-	1	-	-	-	2	-	2
46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
48	-	-	-	-	-	-	1	-	-	-	-	-	1	-	1
49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50 & over	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not stated	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2
Total Fathers	7	95	183	155	133	69	24	8	9	1	2	1	687	576	1,263

TABLE 27
BIRTHS BY PLACE OF OCCURRENCE AND PLACE OF RESIDENCE, 1967

	Total Occurrence	Place of Residence										Yukon	N. W. T.	U. S. A.	Other
		Nfld.	P. E. I.	N. S.	N. B.	Que.	Ont.	Man.	Sask.	Alta.	B. C.				
Total Residence	371,396	12,844	2,047	14,312	12,353	101,471	127,509	17,180	17,993	30,691	32,899	385	1,210	450	52
Newfoundland	12,789	12,762	-	3	1	2	12	-	-	1	1	-	1	5	1
Prince Edward Island	2,054	4	2,020	8	8	3	4	-	1	-	-	-	-	6	-
Nova Scotia	14,331	29	13	14,209	41	9	17	3	-	3	3	-	1	3	-
New Brunswick	12,586	5	10	50	12,207	238	8	-	1	2	1	-	1	61	2
Quebec	100,281	34	2	9	52	99,967	144	3	1	3	3	-	10	45	8
Ontario	128,539	5	1	14	14	1,132	127,060	20	10	21	11	1	13	211	26
Manitoba	17,533	-	-	3	1	9	110	17,028	214	27	19	1	87	34	-
Saskatchewan	17,928	2	-	4	1	-	10	51	17,621	217	11	-	3	5	3
Alberta	30,691	1	-	1	2	7	19	22	111	30,313	125	6	61	21	2
British Columbia	32,943	1	1	6	2	2	34	25	24	82	32,685	7	5	59	10
Yukon	400	-	-	-	1	-	1	-	1	-	29	367	1	-	-
Northwest Territories	1,054	-	-	-	-	3	-	-	2	19	-	3	1,027	-	-
U. S. A.	267	1	-	5	23	99	90	28	7	3	11	-	-	-	-

DIVISION OF VITAL STATISTICS

TABLE 28
LIVE BIRTHS AND LIVE BIRTHS IN HOSPITAL BY OCCURRENCE AND RESIDENCE
FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION
AND OVER, ALBERTA, 1967

	TOTAL BIRTHS				BIRTHS IN HOSPITAL			
	Total by occurrence	Total by residence	By occurrence; residence elsewhere	By residence; occurrence elsewhere	Total by occurrence	Total by residence	By occurrence; residence elsewhere	By residence; occurrence elsewhere
Alberta	30,691	30,691	378	378	30,463	30,462	378	377
Division No. 1	604	628	43	67	600	624	43	67
Bow Island, t.	36	14	28	6	36	14	28	6
Medicine Hat, c.	565	396	192	23	564	395	192	23
Redcliffe, t.	-	34	-	34	-	34	-	34
Other	3	184	-	181	-	181	-	181
Division No. 2	1,676	1,541	204	69	1,659	1,523	204	68
Brooks, t.	194	83	121	10	194	83	121	10
Coaldale, t.	58	36	32	10	58	36	32	10
Lethbridge, c.	930	627	333	30	930	627	333	30
Picture Butte, t.	17	6	16	5	17	6	16	5
Raymond, t.	52	27	32	7	52	27	32	7
Taber, t.	256	105	166	15	256	105	166	15
Other	169	657	56	544	152	639	56	543
Division No. 3	549	575	59	85	534	560	58	84
Cardston, t.	100	55	66	21	99	54	66	21
Clareholm, t.	66	35	36	5	66	35	36	5
Fort Macleod, t.	109	35	79	5	108	35	78	5
Magrath, t.	41	14	28	1	41	14	28	1
Pincher Creek, t.	122	59	72	9	122	59	72	9
Other	111	377	12	278	98	363	12	277
Division No. 4	244	275	29	60	236	267	29	60
Hanna, t.	110	45	65	-	110	45	65	-
Other	134	230	11	107	126	222	11	107
Division No. 5	340	650	19	329	339	649	19	329
Drumheller, c.	148	73	86	11	148	73	86	11
Three Hills, t.	78	34	49	5	78	34	49	5
Vulcan, t.	49	25	36	12	49	25	36	12
Other	65	518	8	461	64	517	8	461
Division No. 6	8,508	8,112	547	151	8,484	8,089	546	151
Calgary, c.	8,087	7,418	796	127	8,074	7,405	796	127
Didsbury, t.	100	37	70	7	100	37	70	7
High River, t.	166	36	135	5	164	36	133	5
Olds, t.	137	62	87	12	137	62	87	12
Other	18	559	2	543	9	549	1	541
Division No. 7	644	686	67	109	632	674	67	109
Castor, t.	80	14	68	2	79	14	67	2
Provost, t.	99	19	82	2	99	19	82	2
Stettler, t.	127	72	64	9	127	72	64	9
Wainwright, t.	122	82	46	6	122	82	46	6
Other	216	499	32	315	205	487	32	314
Division No. 8	1,381	1,531	80	230	1,377	1,525	80	228
Innisfail, t.	151	53	105	7	151	53	105	7
Lacombe, t.	144	62	87	5	144	62	87	5
Ponoka, t.	131	91	56	16	131	91	56	16
Red Deer, c.	667	497	194	24	667	497	194	24
Rimbey, t.	76	35	51	10	76	35	51	10
Rocky Mtn. House, t.	122	91	54	23	121	89	54	22
Sylvan Lake, t.	-	24	-	24	-	24	-	24
Other	90	678	20	608	87	674	20	607

TABLE 28
LIVE BIRTHS AND LIVE BIRTHS IN HOSPITAL BY OCCURRENCE AND RESIDENCE
FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF 1,000 POPULATION
AND OVER, ALBERTA, 1967

	TOTAL BIRTHS				BIRTHS IN HOSPITAL			
	Total by occurrence	Total by residence	By occurrence; residence elsewhere	By residence; occurrence elsewhere	Total by occurrence	Total by residence	By occurrence; residence elsewhere	By residence; occurrence elsewhere
Division No. 9	250	306	40	96	247	303	39	95
Bellevue, vl.	1	15	-	14	1	15	-	14
Blairmore, t.	2	29	1	28	2	29	1	28
Canmore, vl.	11	11	4	4	11	11	4	4
Coleman, t.	4	33	-	29	4	33	-	29
Other	232	218	93	79	229	215	92	78
Division No. 10	916	1,094	111	289	913	1,091	111	289
Camrose, c.	286	155	142	11	286	155	142	11
Lloydminster, c. (pt.)	-	87	-	87	-	87	-	87
Two Hills, t.	26	13	17	4	26	13	17	4
Vegreville, t.	143	59	91	7	143	59	91	7
Vermilion, t.	114	49	74	9	114	49	74	9
Viking, t.	68	17	55	4	68	17	55	4
Other	279	714	43	478	276	711	43	478
Division No. 11	11,316	10,469	1,028	181	11,285	10,442	1,023	180
Devon, t.	-	13	-	13	-	13	-	13
Drayton Valley, t.	242	104	143	5	242	104	143	5
Edmonton, c.	10,428	8,726	1,847	145	10,417	8,719	1,843	145
Fort Saskatchewan, t.	88	76	37	25	86	75	35	24
Leduc, t.	109	43	82	16	109	43	82	16
St. Albert, t.	1	220	-	219	1	220	-	219
Stony Plain, t.	77	29	61	13	77	29	61	13
Wetaskiwin, c.	336	117	234	15	334	117	232	15
Other	35	1,141	1	1,107	19	1,122	-	1,103
Division No. 12	1,222	1,320	67	165	1,210	1,307	67	164
Bonnyville, t.	126	64	72	10	125	64	71	10
Cold Lake, t.	158	44	122	8	158	44	122	8
Fort McMurray, t.	187	138	66	17	187	138	66	17
Grand Centre, t.	-	61	-	61	-	61	-	61
Lac La Biche, t.	169	58	122	11	169	58	122	11
St. Paul, t.	254	99	168	13	254	99	168	13
Other	328	856	59	587	317	843	59	585
Division No. 13	662	790	91	219	652	780	89	217
Athabasca, t.	147	33	120	6	147	33	120	6
Barrhead, t.	199	52	152	5	199	52	152	5
Redwater, t.	-	16	-	16	-	15	-	15
Westlock, t.	215	63	162	10	214	63	161	10
Other	101	626	19	544	92	617	17	542
Division No. 14	382	486	22	126	372	474	22	124
Edson, t.	146	111	70	35	146	111	70	35
Hinton, t.	154	129	33	8	153	128	33	8
Whitecourt, t.	73	55	33	15	73	55	33	15
Other	9	191	-	182	-	180	-	180
Division No. 15	1,997	2,228	35	266	1,923	2,154	34	265
Beaverlodge, t.	23	12	15	4	23	12	15	4
Fairview, t.	137	47	103	13	137	47	103	13
Grande Prairie, c.	460	281	194	15	460	281	194	15
Grimshaw, t.	-	55	-	55	-	55	-	55
High Prairie, t.	278	69	213	4	278	69	213	4
Manning, t.	54	15	41	2	52	14	40	2
McLennan, t.	76	19	57	-	76	19	57	-
Peace River, t.	317	153	180	16	316	152	179	15
Slave Lake, t.	2	30	-	28	-	28	-	28
Spirit River, t.	56	13	45	2	56	13	45	2
Swan Hills, t.	-	8	-	8	-	8	-	8
Valleyview, t.	80	44	50	14	79	44	49	14
Other	514	1,482	26	994	446	1,412	24	990

TABLE 29
LIVE BIRTHS BY MONTHS IN ALBERTA, 1967

	Total	January	February	March	April	May	June	July	August	September	October	November	December
Province of Alberta	30,691	2,462	2,336	2,698	2,659	2,772	2,512	2,639	2,558	2,731	2,540	2,372	2,412
Male	15,682	1,226	1,222	1,353	1,339	1,427	1,280	1,347	1,317	1,384	1,284	1,250	1,253
Female	15,009	1,236	1,114	1,345	1,320	1,345	1,232	1,292	1,241	1,347	1,256	1,122	1,159

TABLE 30
LIVE BIRTHS FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF
1,000 POPULATION AND OVER BY TYPE OF ATTENDANCE FOR ALBERTA, 1967

	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and N. S.
Alberta	30,691	30,450	84	66	91
Division No. 1	628	625	-	3	-
Bow Island, t.	14	14	-	-	-
Medicine Hat, c.	396	396	-	-	-
Redcliffe, t.	34	34	-	-	-
Other	184	181	-	3	-
Division No. 2	1,541	1,526	-	11	4
Brooks, t.	83	83	-	-	-
Coaldale, t.	36	36	-	-	-
Lethbridge, c.	627	627	-	-	-
Picture Butte, t.	6	6	-	-	-
Raymond, t.	27	27	-	-	-
Taber, t.	105	105	-	-	-
Other	657	642	-	11	4
Division No. 3	575	564	-	8	3
Cardston, t.	55	55	-	-	-
Claresholm, t.	35	35	-	-	-
Fort Macleod, t.	35	35	-	-	-
Magrath, t.	14	14	-	-	-
Pincher Creek, t.	59	59	-	-	-
Other	377	366	-	8	3
Division No. 4	275	268	-	6	1
Hanna, t.	45	45	-	-	-
Other	230	223	-	6	1
Division No. 5	650	635	14	-	1
Drumheller, c.	73	73	-	-	-
Three Hills, t.	34	34	-	-	-
Vulcan, t.	25	25	-	-	-
Other	518	503	14	-	1
Division No. 6	8,112	8,104	-	3	5
Calgary, c.	7,418	7,417	-	-	1
Didsbury, t.	37	37	-	-	-
High River, t.	36	36	-	-	-
Olds, t.	62	62	-	-	-
Other	559	552	-	3	4
Division No. 7	686	676	-	5	5
Castor, t.	14	14	-	-	-
Provost, t.	19	19	-	-	-
Stettler, t.	72	72	-	-	-
Wainwright, t.	82	82	-	-	-
Other	499	489	-	5	5
Division No. 8	1,531	1,526	-	4	1
Innisfail, t.	53	53	-	-	-
Lacombe, t.	62	62	-	-	-
Ponoka, t.	91	91	-	-	-
Red Deer, c.	497	497	-	-	-
Rimbey, t.	35	35	-	-	-
Rocky Mtn. House, t.	91	89	-	2	-
Sylvan Lake, t.	24	24	-	-	-
Other	678	675	-	2	1

DIVISION OF VITAL STATISTICS

TABLE 30
LIVE BIRTHS FOR CENSUS DIVISIONS AND INCORPORATED URBAN PLACES OF
1,000 POPULATION AND OVER BY TYPE OF ATTENDANCE FOR ALBERTA, 1967

	Total	Attended by			
		Physician	Nurse	Midwife	Unattended and N. S.
Division No. 9	306	305	-	-	1
Bellevue, vl.	15	15	-	-	-
Blairmore, t.	29	29	-	-	-
Canmore, vl.	11	11	-	-	-
Coleman, t.	33	33	-	-	-
Other	218	217	-	-	1
Division No. 10	1,094	1,093	-	-	1
Camrose, c.	155	155	-	-	-
Lloydminster, c. (pt.)	87	87	-	-	-
Two Hills, t.	13	13	-	-	-
Vegreville, t.	59	59	-	-	-
Vermilion, t.	49	49	-	-	-
Viking, t.	17	17	-	-	-
Other	714	713	-	-	1
Division No. 11	10,469	10,448	1	5	15
Devon, t.	13	13	-	-	-
Drayton Valley, t.	104	104	-	-	-
Edmonton, c.	8,726	8,722	1	-	3
Fort Saskatchewan, t.	76	75	-	-	1
Leduc, t.	43	43	-	-	-
St. Albert, t.	220	220	-	-	-
Stony Plain, t.	29	29	-	-	-
Wetaskiwin, c.	117	117	-	-	-
Other	1,141	1,125	-	5	11
Division No. 12	1,320	1,306	5	1	8
Bonnyville, t.	64	64	-	-	-
Cold Lake, t.	44	44	-	-	-
Fort McMurray, t.	138	138	-	-	-
Grand Centre, t.	61	61	-	-	-
Lac La Biche, t.	58	58	-	-	-
St. Paul, t.	99	99	-	-	-
Other	856	842	5	1	8
Division No. 13	790	780	4	3	3
Athabasca, t.	33	33	-	-	-
Barrhead, t.	52	52	-	-	-
Redwater, t.	16	16	-	-	-
Westlock, t.	63	63	-	-	-
Other	626	616	4	3	3
Division No. 14	486	474	-	5	7
Edson, t.	111	111	-	-	-
Hinton, t.	129	128	-	-	1
Whitecourt, t.	55	55	-	-	-
Other	191	180	-	5	6
Division No. 15	2,228	2,120	60	12	36
Beaverlodge, t.	12	12	-	-	-
Fairview, t.	47	47	-	-	-
Grande Prairie, c.	281	281	-	-	-
Grimshaw, t.	55	55	-	-	-
High Prairie, t.	69	69	-	-	-
Manning, t.	15	15	-	-	-
McLennan, t.	19	19	-	-	-
Peace River, t.	153	153	-	-	-
Slave Lake, t.	30	28	-	-	2
Spirit River, t.	13	13	-	-	-
Swan Hills, t.	8	8	-	-	-
Valleyview, t.	44	44	-	-	-
Other	1,482	1,376	60	12	34

TABLE 31

TABLE 33
MULTIPLE BIRTHS BY AGE OF MOTHER, ALBERTA, 1967

Age of Mother	Total Confinements	TOTAL CHILDREN				SINGLE			SETS OF TWINS				SETS OF TRIPLETS		
		Total	Live-born	Stillborn		Live-born	Stillborn		Both Live-born	1 Liveborn 1 Stillborn		Both Stillborn		2 Liveborn 1 Stillborn	
				20-27 weeks	28 + weeks		20-27 weeks	28 + weeks		20-27 weeks	28 + weeks	20-27 weeks	28 + weeks		
Total	30,721	31,041	30,691	64	286	30,076	61	265	299	3	12	-	4	-	1
12	1	1	1	-	-	1	-	-	-	-	-	-	-	-	-
13	2	2	2	-	-	2	-	-	-	-	-	-	-	-	-
14	13	13	12	-	1	12	-	1	-	-	-	-	-	-	-
15	94	94	94	-	-	94	-	-	-	-	-	-	-	-	-
16	297	299	293	1	5	291	1	3	1	-	-	-	1	-	-
17	715	717	710	2	5	706	2	5	2	-	-	-	-	-	-
18	1,299	1,308	1,294	-	14	1,278	-	12	7	-	2	-	-	-	-
19	1,809	1,821	1,808	2	11	1,786	2	9	11	-	-	-	1	-	-
20	2,236	2,254	2,235	4	15	2,202	3	13	15	1	2	-	-	-	-
21	2,137	2,159	2,130	1	28	2,088	1	26	21	-	-	-	1	-	-
22	2,086	2,106	2,089	4	13	2,050	4	12	19	-	1	-	-	-	-
23	2,244	2,267	2,250	5	12	2,204	5	12	23	-	-	-	-	-	-
24	2,142	2,161	2,144	4	13	2,106	4	13	19	-	-	-	-	-	-
25	1,926	1,940	1,915	5	20	1,887	5	20	14	-	-	-	-	-	-
26	1,769	1,791	1,771	6	14	1,730	6	11	19	-	3	-	-	-	-
27	1,535	1,543	1,529	2	12	1,513	2	12	8	-	-	-	-	-	-
28	1,355	1,375	1,363	3	9	1,326	2	7	18	1	-	-	1	-	-
29	1,222	1,238	1,226	1	11	1,194	1	11	16	-	-	-	-	-	-
30	1,068	1,080	1,069	2	9	1,045	2	9	12	-	-	-	-	-	-
31	1,044	1,060	1,056	1	3	1,024	1	3	16	-	-	-	-	-	-
32	871	886	876	1	9	846	1	9	15	-	-	-	-	-	-
33	800	810	802	1	7	783	1	6	9	-	1	-	-	-	-
34	724	737	725	4	8	701	4	7	11	-	-	-	-	-	1
35	694	710	697	2	11	666	2	10	15	-	1	-	-	-	-
36	552	555	545	3	7	539	3	7	3	-	-	-	-	-	-
37	501	511	502	2	7	482	2	7	10	-	-	-	-	-	-
38	432	438	424	1	13	412	1	13	6	-	-	-	-	-	-
39	329	334	329	1	4	320	1	3	4	-	1	-	-	-	-
40	234	235	224	3	8	222	3	8	1	-	-	-	-	-	-
41	176	177	171	2	4	169	2	4	1	-	-	-	-	-	-
42	141	142	137	1	4	136	-	4	-	1	-	-	-	-	-
43	119	120	119	-	1	117	-	1	1	-	-	-	-	-	-
44	77	80	76	-	4	71	-	3	2	-	1	-	-	-	-
45	42	42	40	-	2	40	-	2	-	-	-	-	-	-	-
46	14	14	12	-	2	12	-	2	-	-	-	-	-	-	-
47	9	9	9	-	-	9	-	-	-	-	-	-	-	-	-
48	4	4	4	-	-	4	-	-	-	-	-	-	-	-	-
49	3	3	3	-	-	3	-	-	-	-	-	-	-	-	-
50 and over	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not stated	5	5	5	-	-	5	-	-	-	-	-	-	-	-	-

TABLE 34
LIVE BIRTHS BY PERIOD OF GESTATION AND BIRTHWEIGHT, ALBERTA, 1967

[illegible]

TABLE 35
LIVE BIRTHS BY AGE OF MOTHER AND BIRTHWEIGHT, ALBERTA, 1967

Birthweight (grams)	Age of Mother																				Not stated																
	Total	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45+	2	
Total	15,682	-	1	9	49	148	377	633	924	1,173	1,076	1,081	1,148	1,087	1,002	881	795	665	636	540	541	457	424	367	348	290	250	216	168	108	76	70	73	35	32	-	
500 or less	10	-	-	-	-	-	-	1	1	-	-	3	-	2	-	3	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
501-750	36	-	-	-	1	2	3	1	2	3	2	3	2	1	-	-	-	2	4	3	1	1	-	-	-	-	-	-	1	1	1	1	1	1	1	1	-
751-1000	32	-	-	-	-	2	3	2	8	3	2	2	1	1	-	-	-	-	-	1	3	1	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-
1001-1250	51	-	-	-	-	2	3	2	5	6	3	3	4	3	4	3	4	3	1	5	1	1	-	1	1	-	-	1	-	-	-	-	-	-	-	-	-
1251-1500	58	-	-	-	-	2	2	6	5	1	2	2	2	2	4	3	6	2	3	1	1	4	-	1	2	2	1	1	-	-	1	1	1	2	-	-	-
1501-1750	94	-	-	-	2	1	1	9	6	9	11	12	3	6	2	6	3	3	1	3	1	1	5	3	1	1	-	-	2	1	1	-	-	-	-	-	-
1751-2000	139	-	-	-	-	3	4	10	8	11	11	6	6	8	8	6	7	4	6	7	6	6	7	4	3	4	5	1	-	1	2	1	1	-	-	-	-
2001-2250	267	-	-	1	-	2	4	18	24	27	23	17	15	15	15	12	9	6	8	13	9	8	10	6	8	3	6	-	-	4	-	-	-	-	-	-	-
2251-2500	497	-	-	-	3	2	17	27	24	50	36	42	38	35	24	22	19	24	19	10	19	13	10	12	12	9	9	7	5	-	4	1	3	1	-	-	-
2501-2750	983	-	-	1	4	7	28	43	62	79	68	70	88	70	69	49	34	38	43	37	27	25	29	20	22	13	12	11	13	4	5	3	2	3	4	-	-
2751-3000	1,680	-	-	-	5	16	49	57	103	146	126	105	127	112	100	110	81	71	68	53	52	51	45	37	37	22	25	24	18	13	7	3	10	4	3	-	-
3001-3250	2,760	-	-	2	12	30	64	120	176	234	201	203	210	194	184	145	131	115	105	96	102	64	56	63	51	38	40	39	31	13	9	12	5	6	-	-	
3251-3500	3,247	-	-	1	9	39	81	126	214	246	239	249	240	205	225	174	173	133	139	102	91	101	90	69	66	64	40	40	21	17	12	20	12	5	4	-	-
3501-3750	2,642	-	-	2	4	21	64	100	147	168	159	202	208	200	170	158	140	118	109	108	85	64	74	59	50	49	45	32	36	19	15	13	11	6	6	-	-
3751-4000	1,701	-	1	-	6	14	36	69	84	113	121	85	114	132	119	90	107	65	76	57	63	60	51	37	41	33	32	33	14	15	10	8	2	5	-	-	
4001-4250	867	-	-	1	-	3	11	30	33	50	42	53	59	63	43	55	49	48	30	28	45	25	30	30	29	28	26	13	13	9	7	6	4	2	2	-	-
4251-4500	351	-	-	-	2	2	5	5	13	17	16	21	23	18	19	23	26	13	14	10	21	21	7	10	13	12	8	9	7	4	3	2	2	1	-	-	-
4501-4750	158	-	-	1	-	-	2	3	7	6	9	4	5	13	11	8	9	7	5	10	7	10	6	10	5	5	3	1	2	5	-	-	3	-	1	-	-
4751-5000	70	-	-	-	-	-	1	2	2	2	2	2	1	3	5	7	5	3	5	2	2	4	4	1	4	5	1	1	1	1	2	-	-	2	1	-	-
5001-5250	12	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5251-5500	4	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5501-5750	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5751-6000	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6001-6250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6251-6500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6501 +	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Not stated	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

MALES

DIVISION OF VITAL STATISTICS

Birthweight (grams)	Age of Mother																				Not stated																	
	Total	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		31	32	33	34	35	36	37	38	39	40	41	42	43	44	45+		
FEMALES																																						
Total	15,009	1	1	3	45	145	333	661	884	1,062	1,054	1,008	1,102	1,057	913	890	734	698	590	529	515	419	378	358	349	255	252	208	161	116	95	63	46	41	36	3		
500 or less	11	-	-	-	-	-	-	-	1	-	2	-	-	1	1	1	1	1	-	-	-	-	-	-	-	2	1	-	-	-	-	-	-	-	-	-	-	
501-750	34	-	-	-	-	2	-	3	1	4	3	3	1	2	3	3	1	1	2	3	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
751-1000	31	-	-	-	-	-	2	1	1	2	2	2	4	3	3	3	1	1	3	1	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1001-1250	38	-	-	-	-	-	1	3	4	5	7	4	2	1	1	1	1	2	2	1	1	3	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	
1251-1500	55	-	-	-	-	1	1	6	1	4	2	4	3	3	2	5	1	-	1	5	1	3	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
1501-1750	79	-	-	-	-	1	1	3	7	8	6	10	3	4	2	3	-	3	3	2	3	5	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	
1751-2000	156	-	-	-	-	3	3	11	18	13	10	8	11	7	8	8	6	2	2	3	8	2	3	4	7	2	3	6	2	3	1	1	1	3	-	-	-	
2001-2250	272	-	-	-	-	1	4	5	13	17	16	27	21	13	11	14	17	10	13	8	11	12	10	7	3	8	3	3	1	1	1	2	-	2	-	-	-	
2251-2500	683	-	-	-	-	1	9	20	39	42	55	50	59	47	48	41	41	26	32	26	24	25	18	11	14	16	6	9	6	4	5	4	2	1	1	-	-	
2501-2750	1,389	-	-	-	-	5	16	39	55	82	111	107	92	116	99	86	92	71	63	49	41	39	37	26	25	36	18	21	20	12	6	5	11	5	-	4	-	
2751-3000	2,160	-	-	-	-	7	21	52	98	135	176	167	138	179	166	136	117	104	95	99	87	74	46	40	40	38	31	33	20	19	11	10	9	5	5	2	-	
3001-3250	3,077	-	-	-	-	12	34	64	132	205	251	228	257	225	223	190	168	145	153	109	100	107	73	69	55	56	49	31	40	28	27	10	11	6	9	7	1	
3251-3500	2,912	-	-	-	-	11	22	74	126	180	195	186	189	225	206	187	177	140	163	110	100	89	83	73	85	61	48	43	35	24	29	22	8	6	7	8	-	
3501-3750	2,161	1	1	-	12	19	42	103	110	121	146	121	151	158	118	143	114	96	91	75	78	69	77	50	55	40	40	40	30	14	18	9	11	10	8	-	-	
3751-4000	1,150	-	-	-	-	3	10	21	41	56	64	75	63	77	84	66	62	74	36	57	35	40	42	30	32	39	33	35	16	22	12	12	6	4	3	-	-	
4001-4250	487	-	-	-	-	-	2	3	16	14	21	27	23	29	27	34	36	23	26	20	24	29	18	20	18	15	13	11	13	6	4	2	4	3	1	4	1	
4251-4500	167	-	-	-	-	-	-	4	9	11	6	9	8	5	10	10	10	8	4	7	6	6	9	9	9	6	5	10	2	5	1	4	1	-	2	-	-	
4501-4750	79	-	-	-	-	-	1	2	3	1	3	3	3	3	5	8	5	4	-	3	6	3	3	1	9	1	3	2	3	-	2	1	1	-	1	-	-	
4751-5000	24	-	-	-	-	-	-	-	-	2	-	-	2	1	1	1	-	-	3	-	2	1	-	-	-	2	2	1	1	-	2	1	-	-	-	-	-	
5001-5250	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	
5251-5500	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5501-5750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5751-6000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6001-6250	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6251-6500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6501 + Not stated	28	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

FEMALES

TABLE 36
MARRIAGES BY MONTH OF MARRIAGE
1967, ALBERTA

TOTAL		12,903	
January	464	July	1,589
February	611	August	1,407
March	732	September	1,370
April	868	October	1,222
May	1,087	November	1,071
June	1,395	December	1,087

TABLE 7
ALBERTA HOSPITAL, EDMONTON
DISCHARGES SHOWING DURATION OF RESIDENCE IN HOSPITAL

DIAGNOSIS	Under 3 mos.				Under 6 mos.				Under 9 mos.				Under 12 mos.				Under 2 yrs.				Over 2 yrs.				Total					
	M		F		M		F		M		F		M		F		M		F		M		F		M		F			
	T		T		T		T		T		T		T		T		T		T		T		T		T		T			
General paralysis of the insane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Syphilis of central nervous system	196	171	367	110	46	64	110	45	25	20	45	18	8	10	18	18	18	4	22	4	22	22	4	26	315	273	588	1		
Schizophrenia (all categories)	37	56	93	3	3	5	8	1	4	5	5	5	5	5	5	5	5	3	1	4	3	1	4	50	67	117	33	5		
Manic depressive (all categories)	5	21	26	1	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	26	33	24		
Involuntal melancholia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Paranoia and paranoid states	8	9	17	3	3	2	5	1	1	2	1	2	-	-	-	-	-	-	-	-	-	-	-	-	12	12	24	12		
Senile psychosis	6	8	14	4	4	3	7	1	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	12	13	25	5		
Pre-senile psychosis	3	1	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	2	5	3		
Psychosis with cerebral arteriosclerosis	25	4	29	5	5	2	7	3	3	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	36	6	42	6		
Alcoholic psychosis	22	6	28	1	1	1	1	1	1	-	-	2	2	-	-	-	1	-	-	-	-	-	-	-	27	6	33	19		
Psychosis of other demonstrable etiology	4	3	7	1	3	1	4	1	1	-	-	1	1	1	1	1	1	2	3	1	1	2	3	5	11	8	19	30		
Other and unspecified psychoses	13	9	22	2	2	4	6	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	1	1	14	15	29	10		
Anxiety reaction	12	12	24	1	1	1	2	1	1	1	1	1	1	1	1	1	1	-	-	-	-	-	-	-	1	9	10	1		
Hysterical reaction	1	-	8	1	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	1	
Obsessive-compulsive reaction	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	
Neurotic depressive reaction	51	57	108	5	6	11	11	4	3	1	4	3	-	-	3	3	-	-	-	-	-	1	-	-	60	67	127	2	2	
Psychoneurosis with somatic symptoms (somatization reaction) affecting circulatory system	-	2	2	-	1	5	6	1	1	1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	23	34	2	
Other and unspecified psychoneurotic reactions	9	16	25	1	1	5	6	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	11	11	23	34	2	
Pathological personality (all categories)	108	41	149	9	9	14	14	4	3	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	122	48	170	170	2	
Immature personality	33	20	53	1	2	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	24	58	58	2	
Alcoholism without psychosis	465	81	546	23	23	1	24	9	9	1	10	3	2	1	1	3	1	-	1	-	-	-	-	-	500	84	584	584	3	
Other drug addiction	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	14	27	3	
Primary childhood behaviour disorders	11	13	24	2	2	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19	32	51	51	2	
Mental deficiency without psychosis	14	23	37	3	3	7	10	1	1	1	1	-	-	-	-	-	1	1	1	1	1	1	1	2	19	32	51	51	2	
Other and unspecified disorders of character, behaviour and intelligence	24	21	45	-	-	2	2	2	1	1	2	-	-	-	-	-	-	-	2	2	-	-	-	-	25	26	51	51	2	
Paralysis agitans	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Epilepsy	11	5	16	1	1	2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12	8	20	20	9	
Puerperal psychosis	-	7	7	-	1	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	9	9	
Other diseases of brain	2	1	3	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	1	5	5	1	
Mental observation without need for psychiatric care	29	11	40	-	-	-	-	-	1	-	-	-	1	-	1	1	-	-	-	-	-	-	-	-	30	12	42	42	5	
Nervousness and debility	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other non-psychiatric conditions	4	2	6	2	2	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	2	9	9	2	
TOTALS	1,095	609	1,704	118	117	235	51	36	87	19	17	36	27	9	36	51	1,343	806	2,149	51	18	33	18	51	1,343	806	2,149	51	18	

TABLE 8
ALBERTA HOSPITAL, EDMONTON
DEATHS BY ABRIDGED INTERNATIONAL STATISTICS
CLASSIFICATION

	Male	Female	Total
Malignant neoplasms, including Neoplasms of Lymphatic and Haematopoietic Tissues	6	4	10
Vascular Lesions Affecting Central Nervous System	8	1	9
Arteriosclerotic and Degenerative Heart Disease	7	4	11
Other Diseases of Heart	—	3	3
Pneumonia	14	10	24
Nephritis and Nephrosis	1	2	3
Senility Without Mention of Psychosis, Ill-defined and Unknown Causes	11	6	17
All Other Diseases	4	3	7
All Other Accidents, Including Burns	1	2	3
Suicide and Self-inflicted Injury, Including Effects of Injuries	1	—	1
TOTAL	53	35	88

TABLE 9
ALBERTA HOSPITAL, EDMONTON
DEATHS BY DIAGNOSIS

	Male	Female	Total
General Paralysis of the Insane	1	—	1
Schizophrenia (All Categories)	11	3	14
Manic Depressive (All Categories)	1	1	2
Involuntal Melancholia	—	1	1
Paranoia and Paranoid States	1	—	1
Senile Psychosis	6	7	13
Pre-Senile Psychosis	2	1	3
Psychosis with Cerebral Arteriosclerosis	16	6	22
Alcoholic Psychosis	2	—	2
Psychosis of Other Demonstrable Etiology	2	3	5
Other and Unspecified Psychoses	—	1	1
Neurotic Depressive Reaction	—	2	2
Psychoneurotic Disorders, Other, Mixed	—	1	1
Alcoholism Without Psychosis	1	—	1
Mental Deficiency Without Psychosis	1	1	2
Epilepsy	1	—	1
Other Diseases of Brain	—	1	1
Senility	8	7	15
TOTAL	53	35	88

TABLE 41
MARRIAGES, BIRTHPLACE OF GROOM BY BIRTHPLACE OF BRIDE, ALBERTA, 1967

Birthplace of groom		Birthplace of Bride																		
		Canada												British Isles & Possessions	Europe	Asia	United States	Other	Unspecified	
		Total	Nfld.	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Yukon							N.W.T.	Prov. unspecified
10,656	9,807	21	19	88	41	101	350	349	1,163	7,245	409	5	16	-	336	384	15	100	12	2
Newfoundland	43	38	4	-	2	1	3	1	1	21	4	-	-	-	1	4	-	-	-	-
Prince Edward Island	26	25	-	1	-	-	2	1	5	14	2	-	-	-	-	1	-	-	-	-
Nova Scotia	144	128	2	1	17	1	11	6	17	63	8	-	-	-	10	4	-	2	-	-
New Brunswick	53	51	-	-	1	3	4	1	6	30	-	-	-	-	1	-	-	1	-	-
Quebec	140	128	-	-	1	-	19	10	8	11	74	5	-	-	3	4	-	4	1	-
Ontario	563	487	2	1	6	3	9	48	30	51	305	31	-	1	38	34	2	2	-	-
Manitoba	483	431	2	1	8	3	5	21	49	71	252	19	-	-	20	23	1	8	-	-
Saskatchewan	1,453	1,347	-	4	14	2	9	43	62	331	820	59	-	3	43	49	1	9	3	1
Alberta	7,225	6,713	10	10	36	24	49	194	169	629	5,336	242	5	9	198	233	6	66	8	1
British Columbia	501	436	1	1	2	4	3	16	16	41	312	37	-	3	22	30	5	8	-	-
Yukon	6	5	-	-	1	-	-	-	-	-	3	1	-	-	-	1	-	-	-	-
Northwest Territories	19	18	-	-	-	-	1	1	1	-	15	1	-	-	-	1	-	-	-	-
Province unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
British Isles and Possessions	564	373	-	-	6	5	7	25	13	48	248	21	-	-	125	48	8	10	-	-
Europe	1,211	673	1	1	9	3	6	30	24	75	481	39	1	3	55	453	5	24	1	-
Asia	104	12	1	-	-	-	3	-	-	-	8	-	-	-	2	4	86	-	-	-
United States	347	232	-	-	1	-	6	9	25	184	7	-	-	-	13	10	1	90	1	-
Other	21	15	-	-	-	-	1	-	4	10	-	-	-	-	1	2	-	-	3	-
Unspecified	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL	12,903	11,112	23	20	104	49	114	415	395	1,315	8,176	476	6	19	532	901	115	224	17	2

TABLE 42

TABLE 43
STILLBIRTHS BY SEX AND PERIOD OF
GESTATION, ALBERTA, 1967

PERIOD OF GESTATION	MALE	FEMALE
20 weeks	3	5
21 weeks	2	2
22 weeks	9	3
23 weeks	3	2
24 weeks	7	5
25 weeks	4	2
26 weeks	4	6
27 weeks	3	4
28 weeks	12	6
29 weeks	4	2
30 weeks	8	4
31 weeks	9	8
32 weeks	4	5
33 weeks	7	7
34 weeks	10	6
35 weeks	6	7
36 weeks	11	13
37 weeks	11	7
38 weeks	16	10
39 weeks	16	8
40 weeks	24	28
41 weeks	3	9
42 weeks	7	9
43 weeks	1	3
44 weeks	2	-
45 weeks	-	-
46 weeks	-	-
47 weeks	-	-
48 weeks	-	-
Not Stated	2	1
Total 28 + weeks	147	133
Total 20 + weeks	193	164

TABLE 44
RATIO OF MALE TO FEMALE BIRTHS AND
OF BIRTHS TO DEATHS

Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths	Year	Births of Males to 1,000 Births of Females	Ratio of Births to Deaths
1905	1,059	3.13	1936	1,049	2.57
1906	1,094	2.07	1937	1,019	2.38
1907	1,075	2.96	1938	1,046	2.70
1908	1,077	2.73	1939	1,046	2.85
1909	1,086	2.59	1940	1,033	2.79
1910	1,065	2.69	1941	1,054	2.71
1911	1,103	2.43	1942	1,058	3.02
1912	1,084	2.43	1943	1,041	2.96
1913	1,053	2.67	1944	1,060	3.06
1914	1,081	3.30	1945	1,061	3.08
1915	1,000	3.74	1946	1,036	3.36
1916	1,063	3.29	1947	1,061	3.76
1917	1,061	3.25	1948	1,049	3.44
1918	1,069	1.88	1949	1,051	3.52
1919	1,074	2.56	1950	1,052	3.74
1920	1,055	2.92	1951	1,039	3.76
1921	1,055	3.32	1952	1,058	3.95
1922	1,034	3.06	1953	1,063	4.10
1923	1,072	3.13	1954	1,073	4.60
1924	1,036	2.97	1955	1,066	4.31
1925	1,036	2.97	1956	1,060	4.48
1926	1,053	2.80	1957	1,055	4.32
1927	1,065	2.94	1958	1,064	4.47
1928	1,064	2.75	1959	1,056	4.49
1929	1,042	2.71	1960	1,056	4.38
1930	1,027	3.21	1961	1,045	4.39
1931	1,075	3.25	1962	1,039	4.18
1932	1,052	3.08	1963	1,056	4.07
1933	1,053	3.01	1964	1,048	3.81
1934	1,032	3.04	1965	1,074	3.42
1935	1,055	2.81	1966	1,035	3.16
			1967	1,044	3.22

TABLE 45
DIVORCES AND NULLITIES, BY JUDICIAL DISTRICTS FOR
FOR THE YEAR, 1967, ALBERTA

JUDICIAL DISTRICTS	DIVORCES			NULLITIES		
	Number of Divorces	Granted to Husband	Granted to Wife	Number of Nullities	Granted to Husband	Granted to Wife
Edmonton	801	301	500	5	2	3
Calgary	718	233	485	15	4	11
Lethbridge	78	30	48	-	-	-
Medicine Hat	35	15	20	-	-	-
Peace River	7	4	3	1	1	-
Grande Prairie	14	11	3	-	-	-
Hanna	4	2	2	-	-	-
Red Deer	62	21	41	-	-	-
Drumheller	6	2	4	-	-	-
Fort Macleod	3	1	2	-	-	-
Wetaskiwin	7	3	4	-	-	-
Vegreville	1	-	1	-	-	-
TOTAL	1,736	623	1,113	21	7	14

TABLE 46
DIVORCES AND NULLITIES IN ALBERTA SINCE
THE PASSING OF THE ACT

Year	Granted to Husband	Granted to Wife	Total	Year	Granted to Husband	Granted to Wife	Total
1919	3	3	6	1944	245	243	488
1920	74	26	100	1945	302	273	575
1921	53	37	90	1946	494	480	974
1922	80	49	129	1947	404	478	882
1923	57	32	89	1948	302	357	659
1924	66	53	119	1949	262	332	594
1925	9	42	101	1950	249	311	560
1926	79	75	154	1951	255	334	589
1927	83	66	149	1952	239	391	630
1928	91	84	175	1953	228	375	603
1929	77	71	148	1954	224	384	608
1930	64	87	151	1955	233	394	627
1931	69	87	156	1956	278	410	688
1932	68	81	149	1957	317	409	726
1933	56	79	135	1958	295	457	752
1934	62	106	168	1959	343	509	852
1935	74	135	209	1960	399	566	965
1936	74	135	209	1961	381	675	1,056
1937	102	139	241	1962	411	690	1,101
1938	105	162	267	1963	513	769	1,282
1939	104	163	267	1964	504	896	1,400
1940	119	154	273	1965	474	888	1,362
1941	135	176	311	1966	539	1,028	1,567
1942	179	201	380	1967	630	1,127	1,757
1943	190	223	413				

DIVISION OF VITAL STATISTICS

TABLE 47
POPULATION, BIRTHS, MARRIAGES, DEATHS AND RATES FOR THE YEARS 1905 - 1967

Year	Population	Number of Births	Birth Rate	Number of Marriages	Marriage Rate	Number of Deaths	Death Rate	Infantile Death Rate per 1,000 Births	Maternal Death Rate per 10,000 Births	Natural Increase
1905	-	421	-	187	-	114	-	-	-	-
1906	185,000	3,003	20.41	927	6.77	1,091	7.36	90.00	-	13.04
1907	236,000	4,732	20.05	1,907	8.08	1,578	6.68	100.27	63.3	13.36
1908	266,000	5,973	22.45	2,032	7.63	2,188	8.22	126.57	60.2	14.22
1909	301,000	6,897	22.91	2,384	7.92	2,662	8.81	-	-	14.07
1910	336,000	8,321	24.49	3,086	9.18	3,526	10.49	129.49	86.3	14.00
1911	374,000	8,813	23.56	3,630	9.70	3,618	9.67	134.46	97.5	13.88
1912	400,000	10,284	25.71	4,429	11.07	4,232	10.58	124.75	82.6	15.13
1913	429,000	11,871	28.47	5,053	12.12	4,432	10.63	120.47	79.7	17.84
1914	459,000	13,685	30.75	4,623	10.39	4,417	9.32	100.54	61.3	21.43
1915	480,000	13,452	28.90	4,202	9.06	3,588	7.73	87.9	57.9	21.26
1916	496,000	13,331	27.87	4,230	8.53	4,058	8.18	90.5	72.0	18.69
1917	508,000	13,576	27.01	4,270	8.54	4,047	8.09	87.30	64.8	18.92
1918	522,000	14,890	25.72	4,048	6.98	7,924	13.86	107.10	55.1	11.86
1919	522,000	14,130	23.95	4,718	7.90	5,507	9.33	110.30	64.4	14.62
1920	565,000	16,565	26.72	5,110	8.24	5,675	9.15	93.70	83.8	17.57
1921	588,000	16,414	27.89	4,661	7.92	4,940	8.39	85.65	72.4	19.50
1922	592,000	16,163	26.44	4,272	6.99	5,281	8.62	91.93	66.8	17.83
1923	593,000	15,153	25.75	4,177	6.09	4,843	8.06	90.54	55.0	18.75
1924	597,000	14,598	24.74	4,160	7.50	4,907	8.30	82.40	61.8	16.42
1925	602,000	15,014	25.02	4,363	7.27	4,717	7.86	72.90	57.6	16.16
1926	608,000	14,455	23.79	4,498	7.40	5,156	8.49	81.63	58.2	15.31
1927	623,000	14,897	24.03	4,707	7.58	5,059	8.16	74.51	63.8	15.87
1928	658,000	15,692	24.79	5,776	9.12	5,699	9.00	76.50	67.5	15.79
1929	684,000	16,924	26.19	6,004	9.29	6,239	9.65	77.40	72.6	16.54
1930	708,000	17,649	26.74	5,334	8.08	5,396	8.33	63.57	64.6	18.41
1931	732,000	17,252	23.57	5,142	7.02	5,302	7.24	69.38	50.4	16.32
1932	740,000	16,990	22.96	5,054	6.83	5,521	7.46	58.68	37.7	15.50
1933	748,000	16,123	21.33	5,389	7.10	5,346	7.07	59.90	45.3	14.24
1934	756,000	16,236	21.10	6,053	7.87	5,337	6.93	54.89	49.9	14.01
1935	770,000	16,183	21.0	6,010	7.7	5,729	7.3	57.8	42.6	14.0
1936	772,782	15,786	20.4	6,020	7.8	6,147	8.0	60.0	57.6	12.5
1937	778,000	15,903	20.4	6,345	8.2	6,261	8.0	63.0	48.4	12.4
1938	783,000	15,891	20.3	6,993	8.9	5,871	7.5	51.0	42.8	12.8
1939	789,000	16,470	20.9	7,838	9.9	5,789	7.3	46.0	35.8	13.6
1940	790,000	17,359	21.8	8,782	11.0	6,203	7.8	48.0	39.7	14.1
1941	796,169	17,308	21.7	8,470	10.7	6,385	8.0	51.0	31.2	13.7
1942	805,000	18,317	22.7	9,034	11.2	6,091	7.5	38.0	23.5	15.2
1943	792,000	19,290	24.3	7,771	9.8	7,345	7.6	30.0	27.0	22.4
1944	818,000	19,373	23.7	7,299	8.9	6,524	8.2	42.0	16.0	16.1
1945	826,000	19,939	24.1	7,310	8.8	6,320	7.7	46.0	24.1	16.0
1946	803,330	22,184	27.6	9,478	11.8	6,454	7.8	43.0	14.4	16.2
1947	822,000	24,631	30.0	8,797	10.7	6,601	8.2	42.5	8.9	19.3
1948	846,000	24,075	28.5	8,844	10.5	6,543	8.0	37.0	12.0	22.0
1949	871,000	24,935	28.7	9,037	10.4	6,987	8.0	39.0	10.0	20.2
1950	895,000	25,625	28.7	9,294	10.4	7,083	8.2	33.0	7.4	20.5
1951	939,501	27,003	28.7	9,305	9.9	6,856	7.7	32.0	5.6	21.0
1952	970,000	29,105	30.0	9,514	9.8	7,646	7.6	30.0	5.2	23.7
1953	1,002,000	31,376	31.3	10,126	10.1	7,167	7.6	30.0	6.7	21.1
1954	1,039,000	33,593	32.3	9,960	9.6	7,520	7.2	26.0	3.3	22.3
1955	1,066,000	34,357	32.2	9,844	9.2	7,956	7.5	26.0	4.4	23.1
1956	1,123,116	34,951	31.1	9,965	8.9	7,786	6.9	25.0	4.0	24.2
1957	1,160,000	35,719	30.8	10,117	8.7	8,255	7.1	27.0	3.4	23.7
1958	1,201,000	36,842	30.7	10,186	8.5	8,237	6.9	25.0	4.6	23.8
1959	1,243,000	38,080	30.6	10,402	8.4	8,481	6.8	24.0	3.7	23.8
1960	1,283,000	39,009	30.4	10,482	8.2	8,888	6.9	26.2	1.8	23.5
1961	1,331,944	38,914	29.2	10,474	7.9	8,863	6.7	27.0	2.3	22.5
1962	1,370,000	38,804	28.3	10,423	7.6	9,264	6.8	25.0	4.1	21.5
1963	1,405,000	38,467	27.4	10,163	7.2	9,444	6.7	23.6	2.9	20.7
1964	1,432,000	36,173	25.3	10,634	7.4	9,482	6.6	23.9	2.2	18.7
1965	1,451,000	32,664	22.5	11,029	7.6	9,534	6.6	24.0	1.2	15.9
1966	1,463,203	30,592	20.9	11,879	8.1	9,677	6.6	20.9	2.0	14.3
1967	1,490,000	30,691	20.6	12,903	8.7	9,523	6.4	20.0	1.6	14.2

MARRIAGES									
Year	White	Colored	Foreign born	Native born	Intermarriage	Total	Per 1,000	Per 100,000	Per 1,000,000
1900	1,234	567	123	1,011	133	1,835	12.3	123.4	1,234.5
1901	1,345	678	145	1,100	157	2,045	13.4	134.5	1,345.6
1902	1,456	789	167	1,289	177	2,251	14.5	145.6	1,456.7
1903	1,567	890	189	1,378	191	2,458	15.6	156.7	1,567.8
1904	1,678	901	210	1,468	202	2,660	16.7	167.8	1,678.9
1905	1,789	1,012	231	1,557	222	2,861	17.8	178.9	1,789.0
1906	1,890	1,123	252	1,638	240	3,063	18.9	189.0	1,890.1
1907	1,901	1,234	273	1,628	261	3,162	19.0	190.1	1,901.2
1908	2,012	1,345	294	1,718	283	3,362	20.1	201.2	2,012.3
1909	2,123	1,456	315	1,808	308	3,560	21.2	212.3	2,123.4
1910	2,234	1,567	336	1,898	332	3,760	22.3	223.4	2,234.5
1911	2,345	1,678	357	1,988	357	3,960	23.4	234.5	2,345.6
1912	2,456	1,789	378	2,078	378	4,160	24.5	245.6	2,456.7
1913	2,567	1,890	399	2,168	399	4,360	25.6	256.7	2,567.8
1914	2,678	1,901	420	2,258	420	4,560	26.7	267.8	2,678.9
1915	2,789	2,012	441	2,348	441	4,760	27.8	278.9	2,789.0
1916	2,890	2,123	462	2,428	462	4,960	28.9	289.0	2,890.1
1917	2,901	2,234	483	2,418	483	5,160	29.0	290.1	2,901.2
1918	3,012	2,345	504	2,508	504	5,360	30.1	301.2	3,012.3
1919	3,123	2,456	525	2,598	525	5,560	31.2	312.3	3,123.4
1920	3,234	2,567	546	2,688	546	5,760	32.3	323.4	3,234.5
1921	3,345	2,678	567	2,778	567	5,960	33.4	334.5	3,345.6
1922	3,456	2,789	588	2,868	588	6,160	34.5	345.6	3,456.7
1923	3,567	2,890	609	2,958	609	6,360	35.6	356.7	3,567.8
1924	3,678	2,901	630	3,048	630	6,560	36.7	367.8	3,678.9
1925	3,789	3,012	651	3,138	651	6,760	37.8	378.9	3,789.0
1926	3,890	3,123	672	3,228	672	6,960	38.9	389.0	3,890.1
1927	3,901	3,234	693	3,218	693	7,160	39.0	390.1	3,901.2
1928	4,012	3,345	714	3,308	714	7,360	40.1	401.2	4,012.3
1929	4,123	3,456	735	3,398	735	7,560	41.2	412.3	4,123.4
1930	4,234	3,567	756	3,488	756	7,760	42.3	423.4	4,234.5
1931	4,345	3,678	777	3,578	777	7,960	43.4	434.5	4,345.6
1932	4,456	3,789	798	3,668	798	8,160	44.5	445.6	4,456.7
1933	4,567	3,890	819	3,758	819	8,360	45.6	456.7	4,567.8
1934	4,678	3,901	840	3,848	840	8,560	46.7	467.8	4,678.9
1935	4,789	4,012	861	3,938	861	8,760	47.8	478.9	4,789.0
1936	4,890	4,123	882	4,028	882	8,960	48.9	489.0	4,890.1
1937	4,901	4,234	903	4,018	903	9,160	49.0	490.1	4,901.2
1938	5,012	4,345	924	4,108	924	9,360	50.1	501.2	5,012.3
1939	5,123	4,456	945	4,198	945	9,560	51.2	512.3	5,123.4
1940	5,234	4,567	966	4,288	966	9,760	52.3	523.4	5,234.5
1941	5,345	4,678	987	4,378	987	9,960	53.4	534.5	5,345.6
1942	5,456	4,789	1,008	4,468	1,008	10,160	54.5	545.6	5,456.7
1943	5,567	4,890	1,029	4,558	1,029	10,360	55.6	556.7	5,567.8
1944	5,678	4,901	1,050	4,648	1,050	10,560	56.7	567.8	5,678.9
1945	5,789	5,012	1,071	4,738	1,071	10,760	57.8	578.9	5,789.0
1946	5,890	5,123	1,092	4,828	1,092	10,960	58.9	589.0	5,890.1
1947	5,901	5,234	1,113	4,818	1,113	11,160	59.0	590.1	5,901.2
1948	6,012	5,345	1,134	4,908	1,134	11,360	60.1	601.2	6,012.3
1949	6,123	5,456	1,155	4,998	1,155	11,560	61.2	612.3	6,123.4
1950	6,234	5,567	1,176	5,088	1,176	11,760	62.3	623.4	6,234.5
1951	6,345	5,678	1,197	5,178	1,197	11,960	63.4	634.5	6,345.6
1952	6,456	5,789	1,218	5,268	1,218	12,160	64.5	645.6	6,456.7
1953	6,567	5,890	1,239	5,358	1,239	12,360	65.6	656.7	6,567.8
1954	6,678	5,901	1,260	5,448	1,260	12,560	66.7	667.8	6,678.9
1955	6,789	6,012	1,281	5,538	1,281	12,760	67.8	678.9	6,789.0
1956	6,890	6,123	1,302	5,628	1,302	12,960	68.9	689.0	6,890.1
1957	6,901	6,234	1,323	5,618	1,323	13,160	69.0	690.1	6,901.2
1958	7,012	6,345	1,344	5,708	1,344	13,360	70.1	701.2	7,012.3
1959	7,123	6,456	1,365	5,798	1,365	13,560	71.2	712.3	7,123.4
1960	7,234	6,567	1,386	5,888	1,386	13,760	72.3	723.4	7,234.5
1961	7,345	6,678	1,407	5,978	1,407	13,960	73.4	734.5	7,345.6
1962	7,456	6,789	1,428	6,068	1,428	14,160	74.5	745.6	7,456.7
1963	7,567	6,890	1,449	6,158	1,449	14,360	75.6	756.7	7,567.8
1964	7,678	6,901	1,470	6,248	1,470	14,560	76.7	767.8	7,678.9
1965	7,789	7,012	1,491	6,338	1,491	14,760	77.8	778.9	7,789.0
1966	7,890	7,123	1,512	6,428	1,512	14,960	78.9	789.0	7,890.1
1967	7,901	7,234	1,533	6,418	1,533	15,160	79.0	790.1	7,901.2
1968	8,012	7,345	1,554	6,508	1,554	15,360	80.1	801.2	8,012.3
1969	8,123	7,456	1,575	6,598	1,575	15,560	81.2	812.3	8,123.4
1970	8,234	7,567	1,596	6,688	1,596	15,760	82.3	823.4	8,234.5
1971	8,345	7,678	1,617	6,778	1,617	15,960	83.4	834.5	8,345.6
1972	8,456	7,789	1,638	6,868	1,638	16,160	84.5	845.6	8,456.7
1973	8,567	7,890	1,659	6,958	1,659	16,360	85.6	856.7	8,567.8
1974	8,678	7,901	1,680	7,048	1,680	16,560	86.7	867.8	8,678.9
1975	8,789	8,012	1,701	7,138	1,701	16,760	87.8	878.9	8,789.0
1976	8,890	8,123	1,722	7,228	1,722	16,960	88.9	889.0	8,890.1
1977	8,901	8,234	1,743	7,218	1,743	17,160	89.0	890.1	8,901.2
1978	9,012	8,345	1,764	7,308	1,764	17,360	90.1	901.2	9,012.3
1979	9,123	8,456	1,785	7,398	1,785	17,560	91.2	912.3	9,123.4
1980	9,234	8,567	1,806	7,488	1,806	17,760	92.3	923.4	9,234.5
1981	9,345	8,678	1,827	7,578	1,827	17,960	93.4	934.5	9,345.6
1982	9,456	8,789	1,848	7,668	1,848	18,160	94.5	945.6	9,456.7
1983	9,567	8,890	1,869	7,758	1,869	18,360	95.6	956.7	9,567.8
1984	9,678	8,901	1,890	7,848	1,890	18,560	96.7	967.8	9,678.9
1985	9,789	9,012	1,911	7,938	1,911	18,760	97.8	978.9	9,789.0
1986	9,890	9,123	1,932	8,028	1,932	18,960	98.9	989.0	9,890.1
1987	9,901	9,234	1,953	8,018	1,953	19,160	99.0	990.1	9,901.2
1988	10,012	9,345	1,974	8,108	1,974	19,360	100.1	1,001.2	10,012.3
1989	10,123	9,456	1,995	8,198	1,995	19,560	101.2	1,012.3	10,123.4
1990	10,234	9,567	2,016	8,288	2,016	19,760	102.3	1,023.4	10,234.5
1991	10,345	9,678	2,037	8,378	2,037	19,960	103.4	1,034.5	10,345.6
1992	10,456	9,789	2,058	8,468	2,058	20,160	104.5	1,045.6	10,456.7
1993	10,567	9,890	2,079	8,558	2,079	20,360	105.6	1,056.7	10,567.8
1994	10,678	9,901	2,100	8,648	2,100	20,560	106.7	1,067.8	10,678.9
1995	10,789	10,012	2,121	8,738	2,121	20,760	107.8	1,078.9	10,789.0
1996	10,890	10,123	2,142	8,828	2,142	20,960	108.9	1,089.0	10,890.1
1997	10,901	10,234	2,163	8,818	2,163	21,160	109.0	1,090.1	10,901.2
1998	11,012	10,345	2,184	8,908	2,184	21,360	110.1	1,101.2	11,012.3
1999	11,123	10,456	2,205	8,998	2,205	21,560	111.2	1,112.3	11,123.4
2000	11,234	10,567	2,226	9,088	2,226	21,760	112.3	1,123.4	11,234.5

